DOCUMENT RESUME

ED 022 596 RC 002 607

By-Tweeten, Luther G.
RURAL POVERTY: INCIDENCE, CAUSES AND CURES.
Oklahoma State Univ., Stillwater. Agricultural Applied Science.
Spons Agency-National Science Foundation, Washington, D.C.
Report No-OAESP-H-1175; PS-P-590
Pub Date Jul 68
Note-106p.
EDRS Price MF-$0.50 HC-$4.32
Descriptors-AGRICULTURAL RESEARCH PROJECTS, *COST EFFECTIVENESS, *ECONOMIC DISADVANTAGEMENT, PROGRAM EVALUATION, RESEARCH CRITERIA, RURAL DEVELOPMENT, *RURAL ECONOMICS, *RURAL URBAN DIFFERENCES, *THEORIES

Supported by a grant from the National Science Foundation, this research was conducted to investigate topics concerning the following four aspects of rural poverty: (1) documentation of the dimensions of rural poverty; (2) description of past public programs to raise incomes of the disadvantaged; (3) an outline of some of the strengths and weaknesses of past programs; and (4) discussion of tentative priorities for future efforts to alleviate poverty. Special attention was given to the interaction between economic and social-psychological factors in the discussion of the causes of poverty; conventional theories of poverty were discussed; and A General Theory Of Economic Stagnation was presented. The criterion suggested for establishing poverty program priorities was cost-effectiveness, where cost-effectiveness was defined as the use of available means to reach given objectives. (VM)

ED022596

RECEIVED
SEP 6 1968
NMSU
E.R.I.C.

Rural Poverty:
Incidence, Causes and Cures

by
Luther G. Tweeten
Department of Agricultural Economics

Processed Series P-590
July, 1968

RC 002 607

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

RURAL POVERTY

Incidence, Causes and Cures

by

Luther G. Tweeten

Processed Series P-590

June 1968

RURAL POVERTY*

Incidence, Causes and Cures

by

Luther G. Tweeten**

INTRODUCTION

National views on poverty have changed markedly. Decades ago, many considered that some of the populace must be poor to avoid consuming what was produced. The consequent savings would be invested, leading to capital accumulation and national economic progress. A widely held current view is that poverty is not only unnecessary for savings and economic progress, but that the poor represent wasted human resources and foregone buying power. Poverty thereby retards national income. It is also recognized that private charity is capable of reaching only a few of the people who lack resources to compete effectively for jobs and wealth. A person can be unemployed for reasons beyond his control.

Americans are disallusioned with treating poverty symptoms. These symptoms include relief roles and public assistance; and in the cities include riots, looting, destruction and violence. These symptoms have causes. The modest public investment to eliminate poverty is as much attributed to inadequate understanding of the problem and effective cures as to public apathy.

Many causes reside in the rural setting which is the origin of many of the city rioters or of their parents. The obvious need to deal with the roots of the symptoms requires an understanding of what causes poverty, and what public program will efficiently and effectively eliminate these causes. That is the purpose of this report.

Part I of this report documents the dimensions of rural poverty and Part II explains why poverty exists. Part III describes past public programs to raise incomes of the disadvantaged, and outlines some of the strengths and weaknesses of these programs. Part IV sets priorities for future efforts to alleviate poverty. Cost-effectiveness criteria are used to rank public programs, giving highest priority to those programs that make limited public funds go furthest to raise incomes of those who have been bypassed by economic progress.

---

*Research for this study was under Oklahoma Agricultural Experiment Station Project H-1175. The research was made possible by a grant from the National Science Foundation.

**Professor of Agricultural Economics, Oklahoma State University, Stillwater. The author is indebted to James Plaxico, Charles Little, Houston Ward, Dean Barrett and Y. C. Lu of the Department of Agricultural Economics for numerous constructive suggestions.

Part I THE INCIDENCE AND CAUSES OF POVERTY

DIMENSIONS OF POVERTY

Poverty in one sense is a product of affluence. The terms "poor" and "poverty" are often used in a relative sense, identifying individuals or groups who have income well below the income of the mass of society. If everyone in this country had the same low income, it is unlikely that we would be discussing poverty or having programs to alleviate poverty. It is affluence that makes poverty visible (by contrast), and provides the public revenue to spend on poverty programs. Also, much of the alienation of the poor stems from their grim realization that they are not a part of the affluence which surrounds them.

U.S. poverty

Measures of the magnitude of poverty are subjective. The poor are those who have a socially unacceptable level of income. Economic development is continually reducing the number of persons below any given level of income. Meanwhile, the socially acceptable income threshold continues to climb, though hopefully at a slower rate than the national income.

Basing poverty on the number of consumer units with personal income under $3,000 (1954 prices), then the number of all consumer units in poverty fell from 47 per cent in 1941, to 35 per cent in 1947, and to 24 per cent in 1962 (Lampman, 1966, p. 31). Depending on which of four measures of poverty was used, in 1957 the incidence of U.S. poverty ranged from 13 to 26 per cent (Lampman, 1966, p. 31). There is some agreement among the measures used that the incidence of poverty has been declining by about one percentage point per year with the poverty income threshold unchanged. Based on Table 1, the incidence of national poverty was 24 per cent in 1959 and 18 per cent in 1966. Whites in poverty outnumber nonwhite (mostly Negro) in poverty three to one. The whites outnumber nonwhites in the population 10 to one. Hence the incidence of poverty is substantially higher among nonwhites than whites.

The poverty income gap, the difference between the income of those in poverty and the socially acceptable threshold income in 1965, was a total of $11 billion, or 1.6 per cent of the GNP. In 1959, the poverty gap was 2.8 per cent of the GNP. It appears that the poverty income gap could now be eliminated in the U.S. without too much strain on the national economy.

Table 1. Number of Poor Households and Incidence of Poverty, 1959 and 1966*

Characteristics of head of household	Number of poor households**		Incidence of poverty***	
	1959	1966	1959	1966
	(Million)		(Per cent)	
Total	13.4	10.9	23.9	17.8
Nonfarm	11.6	10.3	22.5	17.6
White	9.0	7.9	19.6	15.3
Male head	5.0	3.9	13.4	9.4
Under 65 years	3.3	2.4	10.2	6.8
Age (65 years and over)	1.7	1.5	34.0	24.7
Female head	4.0	4.0	45.2	37.7
Under 65 years	2.2	2.0	37.8	30.5
Aged (65 years and over)	1.8	2.0	59.3	48.9
Nonwhite	2.6	2.4	48.9	37.5
Male head	1.4	1.2	39.7	26.9
Under 65 years	1.2	.9	36.7	23.3
Age (65 years and over)	.2	.3	64.4	51.4
Female head	1.1	1.2	69.4	60.8
Under 65 years	.9	.9	68.1	58.8
Age (65 years and over)	.2	.2	76.3	69.9
Farm	1.8	.6	40.9	20.8
White	1.3	.5	34.7	16.9
Nonwhite	.4	.2	85.0	69.7

*Data from (Economic Report, 1968, p. 143).

**Households are defined here as the total of families and unrelated individuals. Poverty is defined by the Social Security Administration poverty-income standard; it takes into account family size, composition, and place of residence. Poverty-income lines are adjusted to take account of price changes during the period. With some modifications for Table 1, a household is classified as poor if its total money income falls below $1,570 for an unrelated individual, $2,030 for a couple and $3,200 for a family of four.

***The incidence of poverty is defined as the number of poor households divided by all households within the specific category.

The foregoing estimates do not adjust for changing public concepts of a socially acceptable income over time. President Roosevelt spoke of the one-third of the nation economically deprived in the 1930's. Yet by current measures, 60 per cent of the nation was in poverty at that time. This means that Roosevelt was using a lower income threshold than current standards.

It has been many decades since the starvation level has been considered the socially acceptable poverty threshold by most people. In the future, the poverty threshold income will increase and will partially offset the reduction in the number of persons below a given income level brought about by economic development.

The "elasticity of poverty" may be defined as the percentage increase in the poverty threshold associated with a one percent increase in median real per capita personal income in the nation. If this elasticity were equal to one, the incidence of poverty would remain virtually stable. Most measures of poverty, such as found in Table 1, assume the elasticity is zero. In fact, the elasticity is greater than zero, hence the usual measures of poverty overestimate progress in reducing poverty.

Rural poverty

The declining incidence of farm poverty is dramatic according to Table 1. Two of five farm families in 1959 were poor; in 1966 only one in five were poor. The incidence of farm poverty was nearly twice the national average in 1959, but had fallen to nearly the national average in 1966.

Table 2 illustrates how an alternate classification system, by Mollie Orshansky, gives a completely different picture of rural poverty. By her system (considered by many to be inferior to the Social Security Classification used in Table 1) there were more persons in rural than urban poverty in 1965. In 1959, there were substantially more poor persons in rural nonfarm residence than rural farm residence. Many poor farm people, of course, retire to non-farm rural residences. But most interesting is the rising incidence of persons in farm poverty--36.5 per cent were poor in 1960, 43.5 per cent in 1965. The corresponding estimate from the Social Security classification was 24 per cent for 1965.

The National Advisory Commission on Rural Poverty listed 14 million rural poor in 1965, 11 million of them white (NACRP, 1967, p. 3). The incidence of poverty (and number of persons in poverty) was as follows: rural farm 29.3 per cent (3.9 million), rural nonfarm 23.6 per cent (9.9 million), and urban 14.8 per cent (19.9 million). In conclusion, the above data indicate that rural poverty is sizeable by any definition, but the art of formulating definitions is primitive.

Further classifications of the poor

The above data only grossly present the anatomy of poverty. The

Table 2. Total Number of Persons in Poverty, Based on Income in Relation to Food Budget, 1960 and 1965*

Sector	1960 Total persons	 Total in poverty	 Incidence of poverty	1965 Total persons	 Total in poverty	 Incidence of poverty
	(Million persons)		(Per cent)	(Million persons)		(Per cent)
Total U. S.	179.3	41.3	23.0	193.3	35.3	18.3
Urban	125.3	22.6	18.0	n.a.	19.4	n.a.
Rural						
Nonfarm	38.4	13.0	33.9	n.a.	10.5	n.a.
Farm	15.6	5.7	36.5	12.4	5.4	43.5

*Data from (USDA, October 1966, pp. 42, 43). Poverty thresholds developed by Mollie Orshansky based on economy food budget (for families of various compositions) multiplied by three. The poverty threshold income ranges from $1580 for a nonfarm one-person family under 65 years of age to $5,090 for a nonfarm family of seven or more persons; and from $1,340 for a one-person farm family under 65 years of age to $4,325 for a farm family of seven or more persons.

classification ignores such factors as assets, particular family needs, and variability of income. Of the 11.0 million poor households in 1966, only 3.7 million had a male head under 65 years of age (Economic Report, 1968, p. 146). Of these 3.7 million households, .4 million male heads were ill or disabled and 2.4 million worked at full time jobs. This left only .9 million poor households with male heads who worked either part time or were chronically unemployed. If we were to somewhat uncharitably and arbitrarily classify this group as the "indolent" group, it would mean that only eight per cent of the U.S. poverty is due to this factor! The remaining 92 per cent is comprised as follows: 39 per cent by the aged (65 years and over), 27 per cent by households with female heads under 65 years of age, four per cent by illness or disability of the male head, and 22 per cent by male heads who do not earn an acceptable income even with full-time employment.

The breakdown of poverty into categories indicated that in 1966, 2.4 million households headed by males and 1.0 million headed by females were poor despite the fact that the head was able bodied, under age 65, and worked at a full-time job. This category of the "fully" employed accounted for nearly one-third of all U.S. poverty, but is often outside of existing programs to alleviate poverty. New date are needed to determine how many of the "poor" have considerable wealth (assets), are in the military (e.g., privates and corporals), and have high future earnings expectations (e.g., students).

The above data are for the entire nation, and are only rough measures of conditions in rural areas. Of 1,583,000 low income rural farm family heads in 1959, an estimated 1,000,000 were boxed-in; they had limited ability to attain adequate earnings (USDA, October 1966, p. 43). Many of the boxed-in families were those with older heads whose potential was limited for retraining and migration to other communities. In the groups were an estimated 343,000 farm families with heads over 65 years of age, 505,000 families with heads 45 to 64 years of age and eight years of less of school; and 152,000 families with heads 25 to 44 years of age with generally less than eight years of formal schooling. Low income families with heads under 25 were not considered to be boxed-in despite low education and assets. This latter group had a sufficient planning and learning horizon to justify investment in training to escape from low income. This left 583,000 families, or 37 per cent of low income farm families, whose heads were not boxed-in by the age factor and by lack of education. Provisions of training and more jobs will effectively reduce low income among the group that is not boxed-in. Public efforts to reduce the number of boxed-in poor will require expensive educational efforts for some. For others, the most efficient way to alleviate poverty will be through transfer payments and early retirement.

POVERTY AMONG REGIONS AND MINORITIES

In addition to the breakdown of poverty given above, two additional dimensions are highly important--race (or ethnic group) and geography. Table 3 indicates that 58 per cent of the poor rural nonfarm families and 53 per cent of the poor rural farm families lived in the South in 1959. A substantially lower percentage, 38, of the poor urban families lived in the South. Approximately 41 per cent of all rural nonfarm families and 46 per cent of all rural farm families lived in the south in 1959, hence, the incidence of poverty was higher in the South than in other areas of the nation. The major extended region of rural poverty is the Southern U.S.--bounded by eastern Texas and eastern Oklahoma on the west, by the Ohio River and Maryland on the north, by the Atlantic Ocean on the east, and by the Gulf of Mexico on the south. Much rural farm poverty outside of this region tends to be widely dispersed within the commercial farming areas. The latter type of poverty has different causes and requires different remedial action than does poverty in sections where it is the dominant pattern.

The Appalachian Regional Development Act was enacted in 1965 to assist the economic development of 370 counties in 12 states. The Secretary of Commerce has subsequently designated other regions for special development programs under the Public Works and Economic Development Act of 1965. The Ozark Economic Development Region is composed of about 125 counties in and near the Ozark and Quachita Mountains of Kansas, Arkansas, Missouri and Oklahoma. A region composed of 119 counties in northern Michigan, Wisconsin, and Minnesota was designated the Upper Great Lakes Economic Development Region in 1966. The same year, a fourth region, the New England Economic Development Region, was also designated, and includes six states[1]. The latter has comparatively few low income farm people, and

---

[1] Two additional development regions, the Coastal Plains (eastern North Carolina, South Carolina and Georgia) and Four Corners (most of Utah, Colorado, Arizona and New Mexico) had also been designated by the end of fiscal 1967.

Table 3. Number of U. S. Families with 1959 Net Cash Incomes under $3,000 and Number of Persons in these Families, by Region and Residence, 1960*

Residence	United States	Northeast	North Central	South	West
			(1,000)		
Families:					
Urban	5,227	1,228	1,245	1,994	760
Rural	4,423	402	1,206	2,477	338
Nonfarm	2,853	330	625	1,647	251
Farm	1,570	72	581	830	87
Total	9,650	1,630	2,451	4,471	1,098
Family members:					
Urban	16,024	–	–	–	–
Rural	15,751	–	–	–	–
Nonfarm	9,858	–	–	–	–
Farm	5,893	–	–	–	–
Total	31,775**	4,762	7,460	16,305	3,313

*Data from (Bird, 1964, p. 5).

**Difference in regional total (31, 840) and U.S. total (31, 775) due to variations in the methods of inflating the samples.

the rural people are really poor only in the light of the urban affluence surrounding them. The incidence of farm poverty (measured by the per cent of farm families with incomes under $3, 000 in 1959) ranged from 42 per cent in Vermont to 20 per cent in Connecticut. No New England counties were among the 250 U.S. counties where rural families had the lowest median income in 1959 (cf. Bird, 1964, pp. 39-46).

The Appalachian development region contains substantially more people than do the Ozark and Upper Great Lakes regions (Table 4). Only the Ozark region lost population between 1950 and 1960. A comparatively small percentage of Appalachian population is rural farm. The 1950 and 1960 data in Table 4 are not strictly comparable because of changes in definitions. This fact tempers any interpretation of the trend in the percentage of the population that is rural farm--which will at any rate be quite low by 1970 in all three regions in Table 4.

A higher percentage of all farms were commercial farms in the Upper Great Lakes than in the other two regions (Table 4). Of the commercial farms, only 13 per cent in the Upper Great Lakes had gross farm sales $10, 000 and greater, whereas, one-third of all U.S. farms were in that category in 1959. The Ozark and Appalachian regions were characterized by a comparatively small percentage of commercial farms, 46 per cent (versus 65 per cent in the U.S.); and a high percentage, 35 and 26 per cent respectively, of commercial farms with sales under

Table 4. Selected Characteristics of Three Designated Development Regions*

	Appalachia		Ozarks		Upper Great Lakes	
	(1950)	(1960)	(1950)	(1960)	(1950)	(1960)
Total population (1,000)	14,809	15,033	2,355	2,251	1,436	1,481
Distribution of population (Per cent)						
Rural farm	21	9	39	18	27	15
Rural nonfarm	33	42	28	42	34	45
Urban	46	49	33	40	39	40
		(1959)		(1959)		(1959)
Distribution of all farms (Per cent)						
Commercial		45.5		46.2		58
Part time		38.0		38.7		30
Other farms		16.5		15.1		12
		(1959)		(1959)		(1959)
Distribution of commercial farms by gross sales (Per cent)						
Over $10,000		17.1		16.4		13
$5,000–$9,999		19.3		22.1		30
$2,500–$5,000		28.8		35.5		40
Under $2,500		34.8		26.0		17
Farm operator level of living in 1959 (U. S. index 1959 = 100)		72		68		98**

*Data from (Coltrane and Baum, 1965; Jordan and Bender, 1966; Loomis and Wirth, 1967).
**Preliminary estimate based on unweighted averages.

$2,500 (versus 14 per cent in the U.S.). Judging by the farm operator level of living index, the Upper Great Lakes was not a serious area of rural poverty in 1959 (Table 4). The level of living indices for the Ozarks and Appalachia were 68-72 per cent of the national average for farm operators in 1959. But whereas the national average increased 69 per cent from 1950-1959, the level of living indices for farm operators in the Ozark and Appalachian regions increased over 100 per cent. By this measure the economic gap is closing between these areas and the remainder of the U.S.

Approximately the northern half of Alabama, a total of 32 counties, is included in the Appalachian development region. A total of eighteen Alabama counties are included in the 250 U.S. counties where rural families had the lowest median income in 1959. Not one of these 18 counties was included in the Appalachian region. Fifteen of the 35 poorest rural counties in the U.S. in 1959 were in Mississippi, and 43 Mississippi counties were listed in the 250 poorest rural counties. But Mississippi is not included in any regional development plan. The really poor counties in the Southeast tend to have sizeable Negro populations. Some might contend that the regional focus on alleviating poverty is being used as a political device to steer funds away from the rural Negro poor.

Negroes

Negroes are by far the largest of the racial minority groups in the U.S. (Table 5). According to Table 1, the incidence of poverty among farm households headed by nonwhites (mainly Negroes) was 70 per cent in 1966. In that year the incidence of poverty was 37.5 per cent among nonfarm families with nonwhite heads. While the latter was high by white standards, it indicates considerably better economic conditions for nonwhites off the farm. Negroes have responded to shrinking farm opportunities and expanding urban job opportunities with massive migration from the farms to cities outside the South. In 1890, 60 per cent of all employed Negroes were farmers or farm laborers. Approximately eight per cent were so employed in 1960. By 1965, only 11 per cent of the farm population was Negro. Over 90 per cent of the rural Negroes but only half of all urban Negroes are in the South. Their low income pulls down the average farm income of all Southern farmers.

The Negro rural population is characterized by high birth rates, low education, as well as by low income. Each 1,000 nonwhite farm women 40-44 years old in 1960 had borne an average of 5,618 children. In the same year nonwhite urban women and white rural women in the same age group had borne 2,361 and 2,873 children, respectively. In addition to high birth rates, a distinctive feature of Negro households is the large number headed by women. A 1962 survey of farmworkers showed that 26.6 per cent of Negro households had female heads compared with 8.5 per cent among their white counterpart (USDA, October 1966, p. 51). Two-thirds of the Negro farm workers performed only hand labor, while the majority of white workers performed more skilled work.

In 1959, only one-fifth of the rural Negro men age 25 to 29 in 14 Southern States had completed high school. Numerous measures of economic, demographic, education and housing characteristics indicated that the gap between whites and nonwhites increased rather than decreased from 1950 to 1960 in rural farm sectors of 14 Southern States. Meanwhile, the gap between the two racial groups in urban areas tended to narrow in education and housing (USDA, October 1966, p. 122).

Problems stemming from racial discrimination, poor housing, high birth rates, family disintegration, inadequate education and low skills will make Negroes a focus of poverty for many years in both rural and urban areas. Between 1920 and 1965, the Negro farm population dropped from 5.1 to 1.4 million. Mechanical cotton pickers and other changes have virtually eliminated the once numerous share cropper. Mechanization of tobacco production would result in another large drop in the Negro farm population. Freeing of poor Negro farmers from cotton or tobacco production by no means signals the end of Negro poverty--it is often only transplanted to the city.

Table 5. Composition of the Nonwhite Population by Residence, United States, 1960 and 1950*

	1960					1950				
		Percentage distribution					Percentage distribution			
			Rural					Rural		
Race	Total	Urban	Total	Nonfarm	Farm	Total	Urban	Total	Nonfarm	Farm
	(1,000)		(Per cent)			(1,000)		(Per cent)		
Negro	18,849	73.2	26.8	19.0	7.8	15,045	62.4	37.6	16.6	21.0
Indian**	546	30.4	69.6	55.3	14.3	342	16.4	83.6	51.9	31.7
Japanese	473	81.5	18.5	13.1	5.4	141	71.0	29.0	10.1	18.9
Chinese	236	95.5	4.5	3.9	0.6	117	93.1	6.9	5.1	1.8
Filipino	182	74.0	26.0	21.9	4.1	62	66.4	33.6	15.3	18.3
Others***	202	68.0	32.0	29.9	2.1	48	23.2	76.8	23.6	53.2

*Data from (USDA, October 1966, p. 121). The 1950 data exclude Alaska and Hawaii.

**In addition to full-blooded American Indians, persons of mixed white and Indian blood are included in this category if they are enrolled on an Indian tribal or agency roll or if they are regarded as Indians in their community.

***Includes Hawaiians, Eskimos, Aleuts, Koreans, Asian Indians, Malayans, and others.

An article entitled "The Causes of Poverty" concluded that the percentage of farm families in the population was associated with higher incidence of area poverty (Thurow, 1967, p. 42). The study also showed that reduction of the number of farmers in poverty by a given amount does not result in an equivalent increase in urban poverty. Education was found to be significantly related to poverty in Thurow's regression model. This is supported by other data which show that the incidence of poverty is 44 per cent among households with family heads who have less than eight years of schooling. The incidence of poverty is only five per cent among households with family heads with four years or more of college (cf. Thurow, 1967, p. 46).

Regression results indicated that being a Negro per se had little impact on the incidence of poverty. However, factors such as low educational attainment, unemployment, part-time job holding, and other socio-economic factors frequently associated with Negroes had a major influence on the incidence of poverty. Whites with similar socio-economic characteristics had nearly the same incidence of poverty as Negroes. This conclusion does not rule out the presence of racial discrimination; it only implies that racial discrimination shows up in variables such as education and employment. Since low education was such an important factor explaining Negro poverty, it might be reasoned that a massive effort to raise education of Negro youth would materially reduce Negro poverty--although the results would take several years to be felt.

Spanish-speaking people

White persons of Spanish surname in five Southwestern states numbered 3.5 million in 1960. This population, though once largely rural, is now 80 per cent urban and only five per cent live on farms (USDA, October 1966, p. 53). The Spanish-speaking population is characterized by very low income and education, and by poor housing and living conditions. The median income of these people in rural areas of each of five Southwestern states was less than $2,000 in 1949 and 1959. Educational attainment of Spanish-speaking residents of the Southwest was even lower than among Negroes in the South. Farm men averaged only 4.6 years of school completed. Birth rates were high--two-fifths of the farm families in 1960 had six members or more. But unlike Negro families, the Spanish-speaking families were stable. There is considerable evidence that the younger generation is accommodating rapidly to a culture and way of life more nearly consistent with economic progress.

American Indians

There are over one-half million Indians in the U.S. They are the most rural of all ethnic groups in the nation (Table 5). The rurality of Indians ranged from a high of 95 per cent in North Carolina to a low of 47 per cent in California (USDA, October 1966, p. 57). Two-fifths of all Indians live in three states: Arizona, New Mexico and Oklahoma.

The Indian population, like the Negroes and Spanish-speaking groups, is characterized by high birth rates, low income, inadequate education, poor housing and frequent health problems. In 1960, 70 per cent of all Indian farm families had incomes under $3,000. The median income of all employed Indian farm males was just over $1,000. Some of the most abject poverty anywhere in the U.S. is found among the Navajo. Yet, the average population increase in Navajo Reservations may be more than four per cent per year (cf. USDA, October 1966, p. 57). On a Navajo Reservation in Utah, the median education in 1960 was less than one year. Median education of all farm male Indians 14 years of age and over ranged from 3.7 years in New Mexico to 8.6 years in California and South Dakota in 1960.

Other ethnic groups

Additional ethnic groups in the U.S. include the rural French-speaking people in Louisiana; the Japanese, Chinese and Puerto Ricans. There are comparatively few Japanese and Chinese in farming, and those who are constitute no low income problems (Table 5). There are a substantial number of French-speaking rural residents of Louisiana. Their income and education levels are low. In two counties in Louisiana, 60 per cent of the French-speaking families had an income of less than $1,500 in 1959, and those who spoke French in their homes averaged only 5.2 years of schooling (cf. USDA, October 1966, p. 61).

SUMMARY AND CONCLUSIONS

The greatest number of persons in poverty are in households with the following characteristics: white, nonfarm, with a head under age 65, with a male head, and outside the South. But the greatest incidence of poverty is in the South, in rural areas, among Negroes and in households with a head over 65 years of age or with a female head. Only a small proportion of the nation's poverty is found in families with an able-bodied male head under 65 who is unemployed or only sporadically employed. Most poverty is characterized by disintegration of the family, by old age, and by failure to earn a satisfactory income even though the male head is working full time.

The incidence of poverty has declined for all major U.S. groups since 1959, based on the income threshold set by the Social Security Administration. The number of nonfarm households in poverty declined two-thirds from 1959 to 1966. On the other hand, the Orshansky classification places the number of farm poor at nearly the same level in 1965 as in 1960. These conflicting data reveal the ambivalence of classification schemes. Nevertheless, it is clear that millions of poor continue to be a major problem in rural and urban areas alike.

The worst is over of the farm-urban exodus, though much is yet to come. From 1929 to 1965, 80 million persons moved from U.S. farms. Many persons moved to farms, leaving a net out-migration from the farm of 36 million. Contrast this with an estimated 47 million persons who migrated to the U.S. from foreign shores from 1820 to 1960. Some 22 million returned to their homeland, leaving a net inflow of "only" 25 million foreigners into the U.S.

Despite the fact that public policy seemed preoccupied with preserving the family farm and was little concerned with preserving the farm family on the great farm-urban exodus, there is considerable evidence that the movement was a success. The incidence of poverty and other measures of economic well being clearly show that migrants as a group, even the Negro, are better off in the city than on the farm. Still too often farm underemployment was traded for urban unemployment. In the succeeding parts of this report, public policies to deal with such problems are discussed.

Part II THE CAUSES OF POVERTY

Before effective public policies to ameliorate rural poverty can be prescribed, it is necessary to understand the basic factors which underlie chronic, area-wide income problems. Special consideration is given to the interaction between economic and social-psychological factors in this section.

CONVENTIONAL THEORIES OF POVERTY

Classical economic theory stresses that economic growth in a region is determined by rates of return on capital, attracting capital to regions where returns are high, and by wages, which draw labor to regions where wages are high. But this theory begs the question why capital and labor earnings are higher in some regions than others and why differences do not disappear over time. Three "reclassified" conventional theories of regional economic development are presented first, but are not very helpful.

Economists have recognized the unique properties of rural poverty and have concocted a separate bag of theories to cope with the pathology of economic growth. Two theories or hypotheses, the settlement hypothesis and the matrix-location hypothesis, have largely preoccupied economists. Following a discussion of these I advance a liminal concept of economic stagnation which attempts to incorporate the past explanations into a general theory.

Some traditional theories of regional growth

Numerous theories have been proposed to explain regional economic growth. The export-base, staple and trade theories emphasize comparative advantage and the growth generating properties of an export industry (Perloff, et. al., 1960, p. 57; Berry 1967, pp. 12-20). These theories tell little of why or how a region can develop an export industry, or why rates of return on investment are higher in some regions than others. Location theory provides a rationale, usually cost-minimization, for location of industry and other economic activity given the location of

markets and resources (Berry, 1967, p. 12). It inadequately accounts for external economies, and the non-monetary factors of location.

The above theories have considerable overlap, and some of their elements are included in my following reclassification of conventional theories of regional growth.

Basic resource theory

One theory is that the economic growth of a region depends on the presence and development of indigenous basic resources--land, water, minerals, climate and locational advantage. Primary industry that depends on basic resources in turn creates secondary and tertiary industry. The fundamental employment and output linkages among primary, secondary and tertiary industries can be quantified and expressed as multipliers.

Internal combustion theory

The internal combustion theory of area growth stresses that economic growth can be generated by internal forces other than the presence of basic resources. Among such sources of economic growth are technology, specialization, division of labor, economies of scale, and a well developed infrastructure.

For example, many industries require little transportation cost or natural resources. The fundamental requirement is often skilled labor and techniques. The technology oriented electronics industries of California and New England are examples.

The attractiveness of the internal combustion growth theory is that, unlike the basic resource theory, the requirements for growth are not written in the stars. Growth can occur in any area or region, and depends largely on the will of indigenous individuals and society to themselves create the kind of environment that attracts capital and labor. Much of the effort is likely to be geared toward creating export industries. If the region is large enough however, the growth can largely occur internally, without significant exports to finance imports from other regions.

External combustion theory

The external combustion theory places the stimuli for growth outside the natural resources or man-made efforts of the region. Growth is generated by stimuli from outside the region. Examples are such factors as luck, or an increase in outside demand for goods produced in a region. It is likely for example that the economic configuration of regions in the U.S. would look quite different today if settlement had first been made in the West, then moved East. The regional economic pattern in the U.S. also would look quite different today had there been no Civil War, no automobile or no cotton gin. The trouble

with the external combustion theory is its fatalistism--a region can find few internal instrumental variables to self-determine its growth. However, the theory does point to a role for an "outsider" such as the Federal government in development of areas or regions that lack impetus for growth from "unstructured" market forces.

In summary, regions are finding that growth is less tied to natural resources and is more dependent on technology and on the attitudes and skills embodied in people. Also it is recognized that the chance factor is highly important, with economies of size sufficiently prominent that a region may possess a comparative advantage simply because it was developed first. The service industries tend to have high income elasticities of demand, tend to be market oriented, and are relatively free from ties to a natural resource base. Regional science suggests that future area economic activity will be less tied to the natural resource and export base, but will be more dependent on luck, conglomerate (size) advantages, and investments in education and research.

The above theories are fragmentary, have a large tautological element, and give little insight into the factors that explain rural poverty. The problems of a depressed area are little closer to solution by concluding that there is too little basic or tertiary industry, or that demand from outside has diminished for products currently being produced in the region. Thus, we must turn to theories more centrally focused on depressed areas.

Settlement pattern hypotheses

History offers some clues why incomes in certain areas have lagged over extended periods. One set of historical explanations is based on settlement patterns. Caudill states that the U.S. was settled in three waves (Caudill, 1965, pp. 3-9). At the forefront were the frontiersmen who were trappers, hunters, traders and adventurers. Following them were scratch farmers who built crude cabins, cleared land and plowed the earth. They had no real attachment for the land, however, and intended to move to a new frontier after the topsoil was eroded and the land began to lose its productivity. The third wave was composed of farmers and town-builders who formed permanent settlements, built schools and churches, and were concerned with conservation of resources. They had a long-term perspective.

But at every stage in the scramble Westward, some groups of frontiersmen and scratch farmers were engulfed by the third wave. "Out of tune with the dominant society and culture...the frontiersmen and scratch-farmer...fell behind a generation or two in their own lifetime" (Caudill, 1965, page 4). The author states that they "...were largely unschooled. They were addicted to direct action and simplicity of thought, ...they were magnificent specialists, but their specialty had vanished" (Caudill, 1965, page 4). He goes on to state that while the dominant culture pulled itself up on the wealth it created, the heirs of the marooned culture tended to fall farther behind their compatriots. The void between them widened because the home life and psychology of the subculture differed radically from those of the dominant culture.

According to Caudill, "This backwards subculture is predominant today in Appalachia and the Ozarks..." (Caudill, 1965, page 54).

Galbraith cites the settlement pattern, the way land was initially divided and occupied, as the factor which gave rise to a whole set of rural institutions inimical to growth (Galbraith, 1956). Early homesteaders, and sometimes the laws under which jurisdiction they settled, gave too little attention to the productivity of the land, to climate, and topography. The result was oversettlement, which in turn led to underemployment and low income. According to Galbraith, minds dulled by privation, enforced idleness, inadequate diets and limited perspective led to subsistence living.

A third settlement pattern hypothesis is that the more educated, progressive and vigorous pioneers settled in what today are the commercial farming areas. Another class of settlers who lacked education and capital, often because they were former indentured servants or sons of renters, were unable to compete with other pioneers for better lands, and were forced by economic realities to settle on lands of lower productivity which today are the low income rural areas. The inertia of initial lack of physical assets and education continued to provide a barrier to economic progress, and the income level continued to lag behind that in other areas.

Several studies have tested the ability of the settlement pattern hypotheses to explain current poverty. Nicholl's analysis of the Upper Tennessee Valley tended to support the hypothesis. He found that "...today's more industrial counties have historically had somewhat superior 'original' natural resources for financing education" (Nicholls, 1957, page 313). However, the currently more industrialized counties appear to have had no economic advantage over other counties in 1900 because of the economic stagnation that followed the Civil War.

Financial support of schools in the 1850-1900 period was closely related to the wealth in agriculture which was greater in what are today the more industrialized counties. Emphasis on education and lower fertility rates in these counties eventually led to industrial development. Nicholls concluded that basic differences in cultural attitudes and agricultural wealth among counties resulted in industrial development rather than vice-versa (Nicholls, 1957, p. 314). This finding, that industrial development and economic growth stemmed from basic initial differences among counties, is generally consistent with the settlement pattern theory of growth.

Booth's study of eastern Oklahoma showed that the current income pattern is directly correlated with initial farm settlement patterns (Booth, 1961). Early farms were too small. The area was, into the late 19th century, under control of Indians who displayed little interest in constructing and improving schools. Furthermore, white settlers were interlopers in Indian territory for a number of years and had little to say about establishment of schools and about spending for other social overhead. Many of the white settlers were from the Southeast and Appalachian areas, with less interest in education than persons from the Midwest who more frequently settled in the Plains in western Oklahoma.

The ranking of counties by income in eastern Oklahoma remained substantially the same from 1910 to 1950. Booth's results were generally consistent with the settlement theory hypothesis. It is interesting to note the income per farm worker in eastern Oklahoma declined relative to the rest of the state between 1910 and 1950. It accomplished this considerable feat while starting at an income level per farm worker of only 59 per cent of the state average in 1910.

Numerous examples can be used to support the settlement theory. It may be said that the Negro is poor because he was a slave and a sharecropper who never really recovered from the economic disadvantage of this "settlement" pattern.

On the other hand, numerous examples can be cited of instances where areas currently are poor but were not always so. Tang's analysis of the Southern Piedmont demonstrated that current differences among counties would not be explained by differences in settlement patterns or land quality (Tang, 1958). Many areas of the rural South, urban slums, parts of the Upper Great Lakes, the Ozarks, and Appalachians, though now chronically depressed, were not always so. The settlement pattern explanation of poverty applies in a sufficient number of cases to justify its usefulness. But there are so many exceptions--cases of poverty not explained by settlement patterns--that it is necessary to look for a more general explanation.

The matrix-location hypothesis

T. W. Schultz states that differences in level of living are basically the consequence of the way the economy of the U.S. has developed and are not primarily the result of original differences in cultural values, capabilities of the people, or man-land ratios (Schultz, 1953, p. 157). Low income areas, once nearly at the same economic level as areas that are now developed and prosperous, did not progress economically as fast because resource mobility was hindered by a disadvantaged position in the location matrix according to Schultz. He argues that economic development occurs in a specific location matrix, that each matrix is primarily urban-industrial at the core and that factor markets and forces of economic development operate best near the core (Schultz, 1953, p. 147).

Numerous studies have tested Schultz's matrix-location hypothesis. Tang found substantial support for the hypothesis in the Southern Piedmont; Booth rejected the hypothesis in its application to eastern Oklahoma (Tang, 1958, Booth, 1961). Diehl found no support for the hypothesis based on cross sectional data for the Southeast between 1950 and 1960 (Diehl, 1966). Bryant found that "For a nation as a whole, the closer a county is to an SMSA (Standard Metropolitan Statistical Area) and the larger the SMSA, the lower are the earnings of farmers" (Bryant, 1966, p. 569). He did find support for the matrix-location hypothesis in the divisions east of the Mississippi River, with factor markets in proximity to urban centers functioning significantly to raise farm income levels. This relationship was not found for divisions west of the Mississippi River, however.

The matrix-location hypothesis is logically compelling and would appear to be as "intuitively obvious" as the widely accepted principles of classical micro-economic theory on which it rests. The hypothesis in all likelihood is sound. Then why is it not more roundly supported by empirical evidence? The reason is that it, like the settlement pattern hypotheses, has been often wrongly applied as the theory of poverty when in fact it is a very partial theory. It is like saying that only demand or only supply determines pricing and output. The matrix location hypothesis has not been proven wrong. It is overshadowed by other more important forces in the many instances where data do not support it.

The Great Plains, by many reasonable predictive standards of the location matrix theory, should be a rural poverty area. Most farms are hundreds of miles from an urban-industrial center. Biological innovations and fertilizers need water for economic application. The vast majority of Plains farmers are dryland farmers, and they have been bypassed by many of the chemical-biological innovations that have substantially raised yields in more humid areas. The downward adjustment required in the labor force and farm numbers to reach a level of an economic unit is stupendous.

There are four principal reasons why the Plains is not now a poverty area: (a) It is very difficult to subsist on an uneconomic unit, because noncommercial sources of livelihood are rare, and weather uncertainties are large and will literally starve-out laggards in unfavorable years; (b) Plains farmers have not lagged seriously in providing education for their children; (c) People migrated into the Plains in a comparatively recent period and were thus accustomed to mobility and did not have an ossified structure of values and institutions that severly limits mobility, and (d) Transportation and other communication networks were maintained so that people separated from an urban-industrial complex by 1,000 miles of paved road were less isolated than persons separated by only a few miles of "trails" from the industrial complex on the other side of a mountain.

Because of large machinery well suited for the Plains topography, the cost per unit of production can be reduced more by expanding farm size in the Plains than in most areas. The savings of the buyer who consolidates units are partially passed on to the seller--hence constitute an opportunity cost of maintaining an uneconomic unit for the farmer who does not sell out and leave the area to secure nonfarm employment. The Great Plains example points out that the problem of development is complex, and no one simple theory explains each situation.

A GENERAL THEORY OF ECONOMIC STAGNATION

The simplicity of the foregoing hypotheses is sacrificed to gain more realism in the following theory of economic stagnation. The theory contains three basic elements that apply to individuals, regions or groups: (a) they are confronted by factors which require adjustments in resources, products and technology, (b) they have identifiable characteristics which give rise to differences in ability to adjust to factors in (a), and finally (c) when the forces requiring adjustments are large relative to the ability to adjust, a liminal level of adjustment is reached at which the environment develops anomie and other disfunctional syndromes inimical to rapid change. The area environment then becomes less rather than more conducive to satisfactory economic adjustments to changing conditions.

Forces that require adjustments

Changes in the economic, social, technical and political environment continually require adjustments in resources, products and techniques. A mistake in settlement pattern is only one reason why changes are needed. Even without an error in settlement, nearly all regions experience the need for major adjustments at one time or another from dynamic sources including (a) a decline in demand for products produced, (b) depletion of natural resources through mining or erosion, (c) technical obsolescence, and (d) a social upheaval.

Example of each can be illustrated for Southeastern agriculture. Irrigated cotton in the Texas High Plains and the West reduced the effective demand for Southeast cotton. Erosion severely depleted fertility of upland slopes, making some land hitherto in cotton unsuited for cash crops. What erosion failed to do, the boll weevil, other insects, and disease often accomplished. Mechanical cotton pickers released many workers from the cotton fields. Development of large tractors greatly expanded the farm size required for optimum efficiency. But because of rough terrain and fragmented fields, this opportunity to reduce unit costs and adjust to lower prices stemming from aggregate excess supply eluded many areas now in poverty. The legacy of slavery, the Civil War, and racial discrimination also have been major factors in the economic and social upheavals that underlie rural poverty.

Ability to adjust to changing economic conditions

All individuals, groups and areas have some capacity to adjust to changing economic conditions, but some have greater capacity than others. This capacity to adjust is highest and the limen least likely to be exceeded in areas where (a) birth rates are low, (b) educational levels are high, (c) transportation and communication are adequate, (d) people have a "mobility ethic" fostered by past migration and willingness to change, (e) the culture of the area is malleable and compatible with that in growth areas to which people must migrate, (f) there are no "institutional" barriers such as racial discrimination within the region receiving migrants to preclude mobility, and (g) the area is in reasonable proximity to an urban-industrial complex.

Thus, the matrix-location concept is one subset of this general hypothesis, whereas the settlement pattern concept is one subset of the previous general hypothesis that identifiable forces cause the need for economic adjustments.

Resource mobility and the limen

The important feature of rural poverty is not that the settlement pattern or other dynamic forces listed above resulted in low incomes, but the fact that incomes have been so slow to recover. These chronically depressed areas have not developed or attracted new industries and jobs at a pace sufficient to replace declining industries. Market incentives have not induced sufficient outmigration to move toward elimination of differences in wages.

For political reasons and to minimize social cost, it would be most desirable to have economic progress within the region that lags economically so that the specter of outmigration need not be confronted. This solution requires substantial economic growth, defined as an increase in real output of goods and services. Potentially the two most appealing solutions in this context are to increase the productivity of farms and to industrialize.[2]

The most optimistic target would be to expand the productivity of farms so that the existing farm operators could achieve a satisfactory income. Even this unrealistic target of maintaining the current number of farms would require outmigration of about half of the farm youth. The realistic conclusion, however, is that there is no feasible way to make current size farms and villages sufficiently productive to provide[3] a satisfactory net farm income. Farms must be expanded in acreage. Thus, in addition to the new jobs required by the excess of births over deaths in a static farm structure, there are also substantial dynamic adjustments required to correct past disequilibrium and accommodate new factors. In serious problem areas, only one in sixteen farm youths will find adequate opportunities in farming.

Local industrial development potentially could create sufficient new jobs so that rural youth need not leave the home community. This alternative will be discussed in more detail later, and only a few of the limitations of this solution are listed here. Many industries have not found the specialized resources, including skilled labor, or the large markets needed to attract them to depressed rural regions. Some industries which potentially can locate in depressed regions must be excluded because they are themselves a declining industry, pay low wages, or have a foot loose history of high mobility. The most favorable prospects for industry have been in core cities of 25,000 or over population, and many farmers are too distant from these cities to be influenced.

From the above discussion it is clear that every farm and community does not have the potential for indigenous economic development. But income growth can nevertheless occur through labor mobility. It is in the lack of labor mobility that we must seek the basic causes and cures to chronic poverty. Labor mobility is the key issue in economic development in rural areas. Economic development, meaning an increase in per capita real income, is a felicious concept because income per person can increase if outmigration is sufficient to counterbalance lack of economic growth.

---

[2] Bringing nonfarm jobs through development of recreation and forestation may here be included as a form of "industrialization."

[3] Part-time farming is an offset to expanding farm size and outmigration, but also has distinct limitations.

Low incomes in underdeveloped nations in Asia, Africa or South American can be explained by institutional restraints including inadequate credit and marketing mechanisms, poor transportation, the caste system, incentive-depressing tenure arrangements, or uncertainties and waste fostered by government bureaucracy. Political instability in developing countires has also created problems. Illiteracy and attendant lack of information to improve efficiency, and an industrial and research sector too small to turn out sufficient amounts of improved capital inputs or absorb excess farm labor can also be blamed. But institutional restraints such as immigration restrictions do not limit mobility among U.S. areas and regions. Economically stagnant rural areas in the U.S. have not been troubled with political instability or isolation from efforts to improve production technology. Also lagging areas are continually exposed to the dominant goals and attitudes of the economically progressive elements of U.S. society through mass media.

In isolated underdeveloped countries, poverty can be explained by an understandable lack of savings, investment and entrepreneurship. Language, institutional impediments and geographic barriers preclude high mobility of resources and techniques. However, capital and credit are readily available to a region from outside regions if returns are adequate in America. Lack of natural resources may impede economic in India for example, but need not for the Ozarks from which the individual can move to a region well endowed with "natural" resources and jobs. The outlook for economic development can be bright for any area that possesses resource mobility in the U.S. The enigmatic and frustrating property of rural poverty in the U.S. is that it can exist as an island in a progressive economy despite the economic pressures for it to disappear. Mobility has not been great enough to overcome the friction in the markets and equalize resource returns among all U.S. areas. A principal reason is the development of certain poverty syndromes that emerge as the required economic adjustments exceed the limen. The poverty syndrome is apparent in the goals, values and institutions found in poverty areas.

GOALS, VALUES AND INSTITUTIONS IN CHRONICALLY DEPRESSED RURAL AREAS

Factor markets in the U.S. generally have operated efficiently to allocate labor and capital to uses where wages and returns are highest. Purely economic behavior would lead to individual decisions that would eliminate pockets of poverty. This has not occurred in areas of chronic rural poverty for reasons rooted in the values of people and in the institutions of the areas.

Values reflect the intensity of feelings with which means or ends are held, and are the personal criteria that determine what behavioral response will follow economic or other stimuli.[4] Institutions refer to family, school, church and government, including tax structure. Properties of values are that (a) they have a functional origin in the need of society to operate effectively in maintaining its welfare and identity, and (b) they result from the dominant striving of individuals to earn a favorable image of themselves in the eyes of themselves and others.

In the long run, values and institutions are flexible and accommodate to dynamic features of economic growth and decline. All areas have considerable potential capacity to adjust to a changing economic environment. If the liminal rate of adjustment is not exceeded, then adjustment takes place smoothly and the ability to adjust may increase as institutions such as schools and family learn to prepare people for the transition. The family accepts mobility as a way of life and local leaders are flexible and constructive in setting policies.

But if the economy calls for a rate of adjustments in excess of the limen, then reactionary forces set up cultural and other barriers to forestall adjustments. The adjustment gap then may grow larger rather than smaller. A general pessimism is likely to pervade the area. Often the young, educated, industrious and optimistic elements migrate and leave local leadership for establishing the "value-climate" in the hands of persons with the opposite attributes. Pessimism is infectious, and colors the outlook of the community toward efforts to make changes consistent with growth.

The gap between values held in the depressed community and those required for success in modern society widen instead of disappear. As the income and culture gap grows between poverty areas and the remainder of society, then boundary-maintaining conditions must be accentuated or the community will lost its pride and identity. The functional objective of the community and hence the focus of value formation becomes one of maintaining community cultural boundaries rather than economic adjustment. And the fact that these means are successful in spite of mass communication media and other pressures to conform with urban-industrial values testifies to the strength of the boundary-maintaining devices. These barriers are discussed later in more detail.

Examples are numerous of the self-generating forces that emerge when the rate of economic decline exceeds the liminal level. The property tax base may decline little or not at all. But there is likely to be a decline in tax base in comparison to other growing regions, and the schools, roads and local government are a "fixed plant" difficult to maintain--much less to improve. The dependency ratio of children and retired persons to the productive age groups will be high because of outmigration of the latter category. This raises school and welfare costs in relation to earnings of those in productive age categories. The quality of education declines because the local tax base is not able to support ever-growing outlays required for well-trained teachers and a diversified curriculum.

---

[4] In this paper the terms "values" and "attitudes" are used interchangeably.

Also important is the unwillingness to utilize the tax base that exists (cf. Welch, 1965). The depressed community is likely to be apathetic about tightening its tax belt to provide better schools because many people who absorb the taxes through education leave the community. The benefit-cost ratio from education for the depressed area itself may be low, and the growing community to which migrants move is benefited by the taxes of the depressed community. Ordinarily, however, schools of the poverty area are so poor that migrants lacking education and ability to compete for city jobs too often become part of the legacy of crime and rioting found in our large cities (cf. Tweeten, 1967). Schnore concludes, after reviewing previous studies "that farm reared migrants to the city enter the urban class structure at or near the bottom, whether the measure is education, occupation or income" (Schnore, 1966, p. 136).

Ideal attitudes for economic progress

Before examining the attitudes and institutions found in depressed rural areas, it is useful to review briefly certain elements of socioeconomic growth theory (Tweeten, 1966). Given the natural resources, then the propensities to save, invest and be efficient will be high and economic development most rapid in an area possessing social-psychological characteristics of secular asceticism and functional activism. While never fully present in individuals, the "ideal" attitudes serve as a norm or basis of comparison with existing attitudes.

Secular asceticism characterizes a populace that is committed to work, either as an end in itself or as the recognized means to some end such as status or material gain. In addition to the shunning of leisure, the ideal encompasses honesty, thrift, market morality and willingness to defer consumptive gratification from accumulated economic goods to the future. It is apparent that this quality contributes to a high rate of savings and work efficiency associated with a dedicated, conscientious and disciplined labor force.

Functional activism characterizes a populace that is imaginative, innovative, perspicacious, manipulative, farsighted, mobile, organizationally capable, and willing to take reasonable risks in use of current assets to pursue future gain. The concept entails the spirit of enterprise and entrepreneural zeal, but does not stop here. It applies as well to public and private enterprise. It is a dynamic quality that gives rise to investment, and influences efficiency through development of new opportunities through formal (e.g., research) and informal (e.g., individual ideas) means.

It is an attitude that underlies efforts to seek out profitable uses of funds for investment, and employment of capital and labor in whatever uses offer greatest returns. It encompasses the need for achievement reflected in the active, functional decisions, both conscious and subconscious, that lead to economic growth. A certain degree of secular asceticism is necessary to have the long-term perspective and willingness to forego current consumption and "save" for an adequate education. But functional activism is needed to channel the education into a curriculum that will have subsequent economic productivity, and to subsequently find a position that productively utilizes the investment in education. Thus, functional activism is important for education and mobility--two factors of crucial concern for low income rural areas. The presence of twin concepts of secular ascetism and functional activism underlie high propensities to save, invest and be efficient, and hence also economic progress.

Low income areas do not possess these two characteristics in sufficient degree to promote local area growth or permit sufficiently rapid outmigration to compensate for declining local income. The principal difficulty appears to be lack of functional activism. I discuss below how attitudes are influenced by the local culture, including status evaluation, family structure, religion, economic and political institutions, and level of economic growth already achieved.

U.S. value orientation

Larson lists the following significant value systems in the U.S. It is apparent that they are quite consistent with secular asceticism and functional activism needed for economic progress.

> Among the several major value-orientations in American culture that serve as guides to choices that people make individually and collectively are listed (1) a central stress upon personal achievement, especially secular occupational achievement, (2) efficiency and practicality, (3) progress, (4) material comfort, (5) external conformity, and (6) belief in science and secular rationality. To the extent that these values are shared by the low income group, motivation would be expected for an improvement in status. Thus, knowledge of new agricultural techniques to improve income would lead to adoption. Or knowledge of alternative opportunities would lead to occupational shifts or migration (Larson, 1955, p. 1422).

Attitudes in rural poverty areas can be contrasted with those for the U.S. listed above by Larson. Poverty in the U.S. tends to be disproportionately concentrated (a) in the South, (b) in rural areas, and (c) among Negroes. Thus the following discussion of Southern attitudes seems apropos.

Southern attitudes

Nicholls lists five principal elements in the Southern way of life that have hampered economic economic progress (Nicholls, 1960):

(1) The persistence of agrarian values embracing work in the soil as the best and "most sensitive" of vocations, deserving of the

maximum number of workers. This view encouraged farming as a way of life, irrespective of economic returns, and diverted energy from industrial development which is such an important part of economic progress. The South, settled prior to the Civil War, was alienated from the remainder of the nation by its unique subculture and by the Civil War and Reconstruction. The South relied heavily on cash crops of cotton and tobacco which required extensive labor. Landowners favored policies to maintain cheap farm labor. One such policy was to avoid industrialization. The above factors were the seeds of a self-reinforcing momentum for economic retardation which led to disparity of income between the South and non-South.

(2) The undemocratic nature of the political structure. Large landholders held political power out of proportion to their numbers. Negroes and poor whites were not proportionately represented, thereby influencing tax policies and reducing the allocation of public funds to roads, schools and other social overhead that was necessary for development of a productive rural farm economy as well as industry.

(3) The rigidity of the social structure. Discrimination limited job mobility and incentives to improve employment potential through education.

(4) The weakness of social responsibility. A rigid social structure emerged which was often preoccupied with preserving white supremacy. The social conscience was guided by a narrow group of elite, dedicated to preserving the status quo. This precluded emergence of social concern and action to improve the lot of the Negroes and poor whites.

(5) The conformity of thought and behavior. As mentioned above, there was little tolerance for dissent from the existing social structure, and formal law enforcement agencies and informal groups (ranging from Ku Klux Klan to press and radio) helped to maintain the tradition. One would expect functional activism to be severely retarded in this social climate.

These above factors have declining ability to explain current problems of rural poverty, even in the Southeast. Status valuation, religion, attitudes toward education, and outlook on life are more relevant, and have a broader geographic base.

Attitudes associated with individual economic performance

Most studies of individual economic behavior are predicated on the assumption that this behavior is rational and goal-oriented, that a person does in fact work toward achieving his needs and goals. The goals and needs are conditioned by the cultural environment, by the biological makeup and personal experience of the individual, and by expectations of success which are conditioned by accessibility of goals in the social and physical environment. The limitations of the environment mean that all needs cannot be achieved immediately, and a hierarchy of needs may help to predict behavior. The following is a suggested hierarchy of needs from basic to higher order, the basic needs ostensibly being fulfilled first.

1. Security needs (self-preservation, protection from immediate physical danger to life)
2. Physiological needs (hunger, thirst, body warmth)
3. Belonging (acceptance by others)
4. Self-realization (freedom, justice, stability, independence)
5. Self-gratification (recognition, prestige, success)

The entrepreneural function is concerned with more than provision of goods and services to meet basic physiological needs. Rather it falls in a higher order, self-gratification category listed above. A subsistence economy, limited in perspective and conditioned to a niggardly environment that has provided only basic needs, might not be expected to afford the "luxury" or functional activism which may rank high in the above hierarchy. Latent functional activism may also be repressed in economically retarded areas for lack of ready capital, a complement of functional activism.

Hobbs, Beal and Bohlen have analyzed the association between the attitude of farm operators and their economic performance (Hobbs, et. al., 1964, p. 153). The most significant attitudes influencing economic performance were independence, economic motivation and risk preference. The single most significant factor was willingness to make independent economic decisions on the basis of functional relevance and not necessarily in conformity with the norms of the local culture. Following Merton, the innovator may be defined as an individual who accepts the culturally defined goals of the neighborhood while rejecting the culturally defined means (Merton, 1957). In contrast the ritualist is defined as an individual who rejects the culturally defined goals and adheres too rigidly to the culturally defined means. The findings of Hobbs, et. al., at the firm level are consistent with the contention of Nicholls that pressures for conformity have inhibited innovation and other aspects of functional activism needed for economic progress.

The above finding that attitudes favorable both toward making money and taking risks are positively associated with earnings appears to be inconsistent with McClelland's study, which found that persons with a strong need for achievement preferred neither very high nor very low risk, but rather preferred manageable levels of risk (McClelland, 1961, p. 238). McClelland found that persons motivated to achievement valued money not for itself but as a yardstick of success. The seeming inconsistency is largely explained by differences in the way terms and attitudes were defined and measured.

Orientation to science and a relative emphasis on mental over physical activity have been found in some instances to give rise to successful economic performance, but the research of Hobbs, Beal and Bohlen revealed little association of these attitudes with economic performance. It is cautioned, however, that their study of individual behavior may have limited relevance for low income areas, where collective rather than individual behavior is the focus of interest.

Status valuation

As stated earlier, behavior tends to be directed to activity that earns high esteem in the eyes of one's self and others. From the standpoing of economic growth, it is important to examine what type of behavior elicits esteem. If it is the belief that dependence on economic employment is indisputable evidence that one lacks capacities of mind and character that entitle one to a higher position (leisure to hunt, fish, commune with neighbors or pursue social graces), then economic growth is inhibited (Brewster, 1961). But if proficiency in economic behavior is the appropriate way of earning a high valuation in the eyes of others, then economic growth is enhanced. The question of what constitutes economic behavior needs elaboration.

The masses try to emulate the activities of those highest in status and avoid the activities of those lowest in status. The bahavior of the upper classes and their habits of work and thrift have an important bearing on economic activity of the populace. This fact according to W. Arthur Lewis has influenced the attitude toward work in the South. His speculation, of dubious relevance, is that

> ...in the slave communities of the New World, the plantocracies were much given to going on picnics and to having a good time and there was much absentee ownership. The middle and working classes of these communities to this day show a greater propensity to consume lavishly than they do to work, and this may plausibly be explained by saying that they have inherited the idea that work is fit only for slaves (Lewis, 1967, p. 37).

The hierarchy of prestige attached to occupations tends to be associated with power and wealth. It is postulated that behavior is motivated and activity directed toward those occupations which are accorded the highest status. If so, economic growth tends to be greatest where the highest status is placed on economically productive occupations such as running a successful business rather than on being a priest, absentee-landlord, sportsman or society patron. If traditional occupations such as professions of medicine and law are ranked in status well above business-oriented occupations which have higher rates of economic return, then economic growth is retarded as the most capable people are attracted to the professions. Fixation on the high status of professional entertainers and athletes vis a vis merchants and skilled workers may give unattainable occupational aspirations to large numbers of Negro youth. Even the farming occupation can be too attractive in the sense that the demand for farming opportunities exceeds the supply of economic units. If a stigma is attached to renting land or being a debtor, this can limit the potential for growth in farm acreage, investment and income.

Additional research is needed to determine the place of labor and status valuation in the poverty milieu. Operators of low income farms probably perform as much physically demanding labor as operators of commercial farms. Operators of farms with low returns are underemployed in the sense that off-farm work or farm reorganization and expansion would bring higher labor returns, but they are not unemployed.

There is considerable evidence to indicate that too many farm youth are attracted either to farming or to high prestige professions (cf. Cleland, 1965; Burchinal, et. al., 1962; Horner, et. al., 1967). As a consequence, their aspirations are often unrealizable because of few opportunities and high entrance requirements.[5] Failing to realize their intended goal, these youth find too late that they are not trained to be employed in the nonfarm occupations for which the demand for workers is great and for which they could have qualified with resources within their reach.

Anomia

Anomia refers to social alienation, a lack of confidence in the social environment. Borrowing from Kluckhohn, Strodtbeck and others; Ford discusses the "Being" orientation found among rural people (Ford, 1965). It is fostered by a subsistence agriculture, where members of society feel subjected to the laws of nature. Appalachian attitude surveys revealed that among the poor, the supernatural is viewed as punitive, and man is viewed as unable to control his own destiny. This outlook can foster three symptoms of anomia: demoralization, fatalism and pessimism. Behavior then may become spontaneous and directed toward filling immediate ends because "long-run plans don't work out anyway." This is in contrast to the "doing" orientation of the urban-industrial middle class and commercial farmers, who have greater belief in the power of man over nature and have had their confidence in long-term plans reinforced by successful past activity.

The reinforcing aspects of success are apparent in the statement of Ford:

> But in the experience world of the very poor, the probabilities of success in almost any major achievement endeavor are relatively low regardless of the effort put forth. To the middle class, the fact that the success chances of the poor are lower may appear irrelevant, for the members of this group are seen as having everything to gain and nothing to lose from seeking to improve their situation. The loss of self-esteem that inevitably attends failure, however, represents a good deal to those who have little

---

[5] Entrance requirements may be schooling, special aptitudes, IQ or capital. In the case of farming, hugh capital requirements are a sizeable barrier to forming an economic unit.

> else but pride. For many, the stakes are too high and the odds too poor in this middle-class, whether it is called the pursuit of success, self-betterment, achievement, or community development. There is only one sure way not to lose, and that is not to play (Ford, 1965, pp. 41, 42).

Universalist norms of achievement, success and high mass consumption are amply advertised by mass media and reach all members of society, rich and poor. To protect the ego, persons trapped in poverty by low education and limited assets and skills often form protective barriers. Either they do not identify themselves with this mass culture or they compensate by various means.

Cognative dissonance

Cognative dissonance refers to situations where noneconomic rewards such as the community environment, family and religion are elevated to superior status to compensate for inadequate "conventional" rewards such as money and material possessions. People in chronically depressed rural areas elevate the values and goals which they can realize to greater prominence relative to the achievement-success norms of commercial society. Persons interviewed in Texas rated the family and religion above job or work as their source of greatest satisfaction in life (cf. Cleland, 1965). Persons also gradually can be expected to lower needs to levels which can be reached in a community of limited opportunity. This becomes a poverty-perpetuating device if these limited motivations and economic needs are passed to the next generation through children.

To some extent, local attitudes are shaped by contrasts with the standard of living in other parts of society. Standards of living and earnings in many areas of poverty in the U.S. are greater than that of the masses in Taiwan or Japan. Yet the values are quite different as measured by the morale of the individuals. The poverty state, one of the mind as well as of the pocketbook, is determined to a great extent by *relative* income levels. The mass media continually remind those with low living standards of their state. Some gap between aspirations and present circumstances leads to creative tensions and motivates escape from poverty. But too large a gap leads to anomia and explosive tensions that are sometimes released in socially unacceptable behavior. If opportunities for improvement are not forthcoming, this state can only lead to dispair, elevation of other nonmonetary factors such as religion and family to higher status--or lead to riots and demonstrations. Some welfare programs of direct subsidy and free food commodities without a reciprocal requirement of some work or job-training to deserve them, can be criticized for reducing the feeling of worth and dignity of the individual, and fostering attitudes of disrespect for work and rationalization for subsidy grants. In short, these symptoms of anomia generated by some forms of public assistance are not conducive to secular asceticism and functional activism needed for economic progress.

Religion

The role of religious culture in economic development has been discussed at length by Weber and other authors. The Protestant Ethic has been analyzed as a set of quasi-religious attitudes that simultaneously embodied secular asceticism and functional activism (Tweeten, 1966). W. Arthur Lewis summarizes:

> If a religion lays stress on material values, upon work, upon thrift, and productive investment, upon honesty in commercial relations, upon experimentation and risk bearing, and upon equality of opportunity, it will be helpful to growth, whereas in as far as it is hostile to these things, it tends to inhibit growth (Lewis, 1957, p. 105).

The dominant religious tradition in many areas characterized by rural poverty in the fundamentalist Protestant sects that place much emphasis on the merits of work, thrift, and high moral standards; and on the evils of conspicuous consumption. Of these groups, Loomis writes:

> It is likely to be a small homogeneous sect with strong emphasis on emotionalism and evangelism. It is likely to extol the virtues of self-discipline, hard work, thrift and industry, and to deplore the "sinful"(and costly) indulgences of worldly and high-living pleasures. Although these choices are made in the name of religion, their selection and pursuit are consistent with economic rise (Loomis, 1960, p. 192).

The attitudes fostered by these religious groups are virtually the epitome of secular asceticism, hence are compatible with one facet of economic growth. But the emphasis on other worldly goals and conformity, and the lack of emphasis on education are too binding on the innovative, imaginative spirit required for functional activism. Thus, this type of religion is hypothesized to inhibit the spirit of enterprise and mobility needed for economic progress.

The family

Another institution which is found in rural poverty areas is the extended family system. The meaning and functional origin of the system are discussed by Okun and Richardson:

> Under the kinship system, all family members, however distant, claim the right of support from the group, as well as the right to advise and pass judgments on each other's activities, regardless of their individual contributions. The advantage of such a system lies in the economic security it provides to individuals living at or near subsistence levels. But to the extent that individual effort is motivated by personal economic reward, the

> extended family system offsets market incentives to labor mobility, and to increased effort more generally, because of the obligation of the individual to share his rewards with the family (Okun and Richardson, 1961, p. 335).

The reference is not to the family farm structure which permeates agriculture and which has demonstrated a high degree of efficiency compatible with out industrial society. Rather at issue is the situation found frequently in low income rural areas where there is strong dominance of family and kinship groups over other groups. Priority of the family group limits mobility to economic employment where pay is highest. The family confers status, provides security against old age and misfortune, and rewards and punishes individual members. The familistic culture provides work opportunities on an ascriptive basis. The individual is accorded status without demonstrating ability to achieve economic success. This contrasts with industrial society which is affectively neutral in providing jobs (to those most qualified) and gives status on the basis of economic achievement.

The extended family culture may have served a vital function of providing security in traditional society. But for a depressed area to grow, people must be cognizant of universalist norms (trust outsiders and not feel they are aliens in mass society) must respond to economic incentives (not be tied to the family but be willing to migrate to obtain better work opportunities) and must place some value on organizations outside the family (they must attend meetings, school, etc., to become acquainted with values and requirements for productive economic roles in commercial society). Many programs to eliminate poverty and speed resource adjustments operate through institutions such as schools and local committees. Strong reliance on family to the exclusion of outsiders can stifle organized efforts to raise income and living standards.

Education

The answer to problems of farm poverty lies in mobility. Farm people may adjust to distant or near nonfarm employment, but they must adjust. As stated earlier, only a small minority of farm youths can expect to remain on the farm in some depressed regions. There are few factors more crucial for mobility than proper skills and attitudes. Education plays a part in both.

Attitudes of poverty areas toward education are especially important because education imparts productive skills which affect income, and imparts attitudes to the new generation. It is one of the few opportunities to intervene in the cycle of parent-child attitude formation even though studies show that the family is dominant over the school in forming aspirations. Education is one of the few socially acceptable ways of altering attitudes inimical to economic growth. It is the major cultural bridge between a poverty area and the mass, achievement-oriented society.

University of Michigan researchers constructed a measure of the need for achievement based on the ratings by individuals of the prestige of nine occupations (Morgan, et. al., 1961, Appendix C). The hypothesis was that a person with a sizeable need for achievement would place an unusually high value on succeeding in a high prestige occupation and an unusually low value on succeeding in a low prestige occupation. Results were consistent with the hypothesis and it was found that persons who were most educated had the highest measured need for achievement. Statistical significance was not high, and questions of causality remain, however.

In a later study, an "index of concern for progress" was constructed and can be considered a measure of functional activism (Morgan, et. al., 1966, p. 351). A sample of 2214 household heads revealed a positive and consistent relationship between education and concern for progress. Other data to be presented later show that greater educational attainment is associated with higher labor force participation, lower unemployment, greater mobility, and higher income. There is little doubt that education in some way contributes to these positive forces for economic progress. It is, therefore, especially disturbing to note these frequent problems affecting the quality and quantity of education in low income areas (cf. Tweeten, 1967):

(1) Local schools are not adequate to invest in the individual the productive assets needed to earn an acceptable income level. Both the quality and breadth of the curriculum are at fault. High school graduates are poorly equipped either for higher education or for immediate competition in the nonfarm job market.

(2) Persons are simply uninformed of job opportunities outside of their restricted environment. Students do not face occupational decisions while in school, partially because of inadequate formal counseling, but mainly because the local environment provides little first-hand evidence of opportunities and entrance requirements in growing occupations. Many students drift along without direction until they become dropouts. They belatedly realize their inadequacies of training, but deficiencies are too large to go back to school and make up.

(3) Youth have high occupational aspirations but are unaware of training and the initial financial assets required for the occupation to which they aspire. By the time they learn what are the requirements, it is too late, and in their minds too costly, to correct past mistakes in preparation. An Arkansas study found that 70 per cent of the high school students in selected low income counties of the state over-aspired significantly for their capability level (Jordan, et. al., 1967). This was partly because the quality of basic education was not adequate--lack of reading skills reduced capability-test scores. It is also because the environment is not conducive to progression from the fantasy to reality stage of formulating aspirations. Nearly 42 per cent of the students aspired to professional, technical and kindred occupations. The gap between aspirations and capability was less in large than in the small high schools.

(4) Youth plan for an occupation such as farming and obtain

"appropriate" education for it. After completing their education, they find that opportunities are few and disappointing in their chosen field, but have too little preparation to transfer and better their economic position in another promising field of employment.

(5) People see opportunities for labor transfer, but the personal "social" costs are too high. They wish to take the better-paying job, but the difficulty is too great of separating from family and friends and of adjusting socially to a new environment. This attitude reduces their interest in education. The direct monetary costs of labor transfer are comparatively low. That the social cost is large is evidenced by very high rates of migration back home after holding a job in another area. Researchers found that for every 10 workers who left agriculture in the Tennessee Valley in the year 1958-59, 13 returned to the farm sector. (This year was not typical because the economy was weak). Studies of the U.S. economy also reveal very high rates of movement of farm-reared people back to farms after holding a nonfarm job (cf. Perkins and Hathaway, 1966).

The limited perspective afforded by parents and peers in the isolated rural environment can lead to little value placed either on higher education or a job outside the community; and the opposing forces of mass communication media, teachers, school counselors and other aspects of school environment often are not sufficient to compensate. Concentration of educationally deprived children in certain schools tends to reinforce each others' inadequacies.

Data in Tables 6 and 7 show conclusively that education levels are lower in poverty areas than in other areas of the U.S. Not only are median schooling completed lower and dropout rates higher, but also the quality of education is below national standards.

The more serious areas of rural low income have pupil-teacher ratios comparable to those in more prosperous areas (Table 6). But measured by teacher salaries and inputs (annual expenditure) per student, poverty areas rank low.

More recent data in Table 7 again confirm that educational attainment is especially low where income is low--in the rural farm sector, the South and among nonwhites (Table 7). In rural farm areas of the South in 1960, only 23.3 per cent of the white and 5.7 per cent of the nonwhite adults had completed at least four years of high school. This means that 76.7 per cent of the white and 94.3 per cent of the nonwhite adults had not completed high school. Dropout rates in 1960 among 19 year olds were over 50 per cent for farm youth in the South Atlantic and East Central regions, where low incomes are frequent.

Low educational attainment can be partially explained by two economic factors: (a) the economic rate of return on education expenditures for individuals is lower and opportunity costs are higher in rural poverty areas than in economically advanced areas, and (b) a considerable portion of education is supported from local tax revenues, principally property tax, and the local tax base is too low to support an

Table 6. Selected Measures of Education Quality in Elementary and Secondary Schools, U.S. and Low Income Problem Areas*

	Educational attainment rural farm population 25 years of age and older, 1950	Pupil-teacher ratio 1955-56	Annual expenditure per pupil in average daily attendance 1955-56	Average April salary of full-time teachers, 1957
	(Median years of school completed)	(Number)	(Dollars)	(Dollars)
U. S. (All)	9.3	21.8	294	406
U. S. (Rural-farm)	8.7	**	246	**
Rural Poverty Areas				
Appalachian Mountains	8.0	24.2	175	333
S. Piedmount and Coastal Plains	6.8	23.6	181	314
Southeastern Hilly	7.2	24.4	153	280
Mississippi Delta	5.5	24.4	191	355
Sand Coastal Plain, S.W.	7.8	20.5	251	342
Ozark-Ouachita	8.3	22.6	188	296
Northern Lake States	8.5	20.5	306	392
N.W. New Mexico	6.4	21.8	261	394
Cascade & Rocky Mtns.	9.0	18.1	358	386

*Data from (Folkman, 1961)

**Not available

Table 7. Percentages for Educational Attainment of Persons 25 Years Old and Over, by Color, for the United States and the Regions, by Residence, 1960*

Area and years of school completed	Urban		Rural nonfarm		Rural farm	
	White	Non-white	White	Non-white	White	Non-white
UNITED STATES						
4 years high school or more	46.4	25.3	36.5	11.6	31.6	7.1
1 or more years of college	19.6	9.3	12.8	4.1	9.5	2.4
Northeast						
4 years high school or more	42.3	27.8	41.1	23.1	35.6	13.7
1 or more years of college	16.8	8.4	14.8	7.5	11.9	4.5
North Central						
4 years high school or more	45.4	26.4	38.1	19.4	35.6	15.5
1 or more years of college	18.2	9.3	12.1	6.1	9.3	4.4
South						
4 years high school or more	47.6	19.1	29.8	9.4	23.3	5.7
1 or more years of college	21.7	7.8	10.8	3.6	7.8	2.1
West						
4 years high school or more	54.0	40.6	44.6	22.0	42.0	25.0
1 or more years of college	24.5	15.6	17.5	6.2	15.2	5.6

*Data from (Nam and Powers, 1963).

adequate educational system. Furthermore, because much of the benefits of education are lost to the local community through outmigration, the "local" benefit-cost ratios are low and do not motivate the community to increase outlays.

Several sociological studies document the attitude toward education in areas of the South where income levels are low (cf. Cleland, 1965). In Texas, researchers found that interviewed homemakers cited "relations with family" and "religion" as the source of their greatest satisfactions in life. "Job or work" and "education" received an insignificant response. Louisiana researchers found that respondents with low educational attainment tended to view their work more favorably than did those with higher education, indicating perhaps that greater educational attainment motivates high job aspirations which persons who stay in the area are unable to fulfill. However, high-prestige occupations were universally desired for sons of respondents. These aspirations were unrealistically high in many instances, as was cited earlier for Arkansas children (Jordan, *et. al.*, 1967). The forming of aspirations progresses through fantasy, tentative and realistic phases. Many individuals in depressed communities appear to pass not far beyond the fantasy stage of aspiration formulation. Further research is needed to determine not only the level of aspirations for children, but also the depth of motivation for realizing these aspirations, knowledge of job requirements (education, migration, capital funds required for training and getting started in occupation), and willingness to overcome obstacles to reach occupational goals.

Sociologists in Kentucky found that a highly important variable in explaining escape from poverty was the homemaker's education which, if sufficient, seemed to provide adequate awareness of alternatives and conflict with present circumstances to create a desire for mobility. Other research repeatedly points to the mother as a highly important source of motivation for achievement in the child (cf. Horner, *et. al.*, 1967).

An Alabama study found that farmers ranked lower than other occupation groups in aspiration levels. The study found little value orientation toward education among persons who, currently at low income levels, needed it most to enhance mobility and earnings (cf. Cleland, 1965). In summary, research shows that educational aspirations were higher among nonfarm than farm youth, among youths with more highly educated parents, among youths in small families, and among families with higher incomes.

Multivariate analysis based on a U.S. sample of 939 families was used to account for the variance in completed education of youth based on characteristics of their parents and environment (Brazer and David, 1962). The mean education level was 11.82 years. Having an uneducated father, *ceteris paribus*, reduced the completed education of the children 1.60 years (Table 8). Other things equal, children who grew up in a household where the breadwinner was a farmer and had always been a farmer received .19 years less education than the average. Being from a large family and from the South each reduced education .54 years. If the family head possessed

Table 8. The Estimated Impact on Educational Attainment of Children, given the Parental Characteristics often Prevalent in Rural Poverty*

Item		Years of school completed
Overall group mean for children		11.82
Adjustments for parental characteristics often found in farm poverty areas:		
Uneducated father		-1.60
Farmer		- .13
Always lived on farm		- .06
Large family		- .54
Low success drive		- .26
Fundamentalist religion		- .55
Young father		- .92
South		- .54
Negro		- .52
	Total	-5.12
Group mean for children adjusted to above characteristics of parents found in poverty areas		6.70

*Data from (Brazer and David, 1962)

little motivation for achievement and believed that hard work was less important than luck, educational attainment of children dropped .26 years. Being from a fundamentalist church background where the family head attends infrequently lowered the education level another .55 years. If the father was very young when the youth was born, the youth on the average tended to lose another .92 years from the educational level. And if the family is Negro another .52 years of school is subtracted.

It is obvious that being from a family possessing these characteristics constitutes several serious strikes against educational attainment. Summed over all categories, the total is 5.12 years. Subtracted from the group mean of 11.82 years, the result suggests that a child in these circumstances would receive only 6.7 years of education. These listed characteristics often are found in rural poverty areas. Thus, it is not surprising to find this result is not inconsistent with actual median education levels for poverty areas reported in Table 6. Yet there is no one "poverty" or "income" variable in Table 8. Perhaps poverty and attendant low educational attainment is the result of a concentration in one family or area of negative factors such as in Table 8. Even being from a white family outside the South but possessing the other characteristics would raise the educational level just over one year to approximately eight years according to data in Table 8.

The relatively small impact on the children's education of being from the farm gives some basis for optimism in raising educational levels in farm poverty areas. The fact that education of parents is such a large factor in the child's education means that progress may be slow, however.

Characteristics (mainly of parents) listed in Table 8 explained 44 per cent of the variation in educational attainment of the youth. Attitudes and other factors associated with each individual youth apparently are confounded with regional, family and religion factors listed; and also account for some portion of the unexplained variation in attainment. The attitudes of the individual may be more readily influenced by corrective policies than the factors listed in Table 8. Although income was not explicitly included, most of the factors are influenced by income.

SUMMARY AND CONCLUSIONS

Poverty is no longer considered to be functional--most Americans now view it as disfunctional and a social cost. There is a desire by many Americans, rich and poor, to eliminate poverty. This desire has not been matched with efficacious prescriptions by economists. The theory explaining poverty was examined to provide a foundation for establishing the means to eradicate poverty.

A liminal theory of poverty was advanced. The theory embodies three concepts: (a) that there are forces originating from settlement patterns, depletion of resources, obsolescence of production techniques, changes in product demand, and other sources that confront regions with the need for economic adjustments, (b) that there are factors such as proximity to an urban-industrial complex, adequacy of transport and communication facilities, and education which determine the ability of a region to adjust to forces for change, and (c) that the need for adjustments leads to creative tensions and may actually facilitate area adjustments up to a liminal point. Once the limen is reached, however, reactionary forces apparent in goals, values, and institutions, set in which are inimical to rapid and smooth adjustments. Economic adjustments do not stop, but they become more painful, as the environment of the area begins to lag seriously in preparing people socially, psychologically and educationally for the adjustments. It is the anomia and cognative dissonance that permeating area-wide poverty that separates the subculture of poverty from the merely "low income" people, and separates the "poor in spirit" from those merely lacking material possessions.

Gestalt psychology emphasizes that individual behavior can only be understood within the context of the environment in which it occurs. The valuation of education by people is strongly influenced by their local perspective. And the perspective in rural areas is strongly influenced by agriculture. Boys who become farm operators in a depressed agriculture are likely to realize little economic return on education. It follows that community-wide indifference toward the value of education can be fostered by this poor payoff from education in the home community. The momentum of indifference and low incomes caused by a declining industry in a large city can be offset by the optimistic outlook and higher incomes of growing industries in that city. Progressive farmers can support favorable attitudes and institutions such as good schools in commercial farming areas in which only a few farmers are poor. Thus area-wide rural poverty is a more serious problem than poverty interspersed among plenty. There are fewer opportunities within area-wide poverty to lift the poor by the communities' somewhat frayed bootstraps. The liminal theory of rural poverty is based on the premise that economic decline fuels further decline. The declining tax base can only maintain existing mediocre roads and schools. The community would be better off with fewer but higher quality roads and schools, but the location of farms and community's attitudes preclude such changes. A declining tax base also cannot support an able, aggressive local government that can be a factor in economic growth. But consolidation of counties to support such a structure also has little chance of approval.

Inadequate funds for local social overhead such as schools, libraries, recreation facilities, police, fire protection, water, and sewage disposal make the area unattractive compared to other areas and reduce chances of industry locating there. The families from other areas who might provide initial high-level management for industry are not attracted due to lack of cultural attractions, good schools and progressive attitudes in the depressed area.

Often more important in industry location than detailed economic study of nearness to markets or access to resources is the climate of optimism based largely on success of previous industry in a location. In the minds of businessmen a depressed economic area can be prima facia evidence that there are factors present which are not conducive to future success. This state of mind is self-reinforcing. There are large economies in growing markets. A generally optimistic climate for plant location (which ex ante may have been economically irrational for each firm individually) leads to sufficient plants to creat market advantages for all in a market that grows to make the plants individually and collectively profitable. Depressed rural areas will find industry subsidies necessary to attract industry against the inertia of pessimistic expectations and inadequate infrastructure.

Part III PAST PROGRAMS

This section contains a list of past poverty programs: their content, advantages, and shortcomings. Politicians increasingly recognize the relationship between rural poverty and urban slums, and accordingly have declared war on all poverty. The ensuing programs have come too late--millions of rural people with inadequate investment in the human agent have already migrated. But millions more will migrate from rural areas to cities in the future, and the mistakes of the past must not be perpetuated. An analysis of past programs is a point of departure for analyzing improvements that can be made in future programs.

In the realm of poverty programs, rural cannot be separated from urban. Any serious public policy to raise the income of farm people entails off-farm education and off-farm jobs. Schooling and jobs mean government programs to support education and maintain national employment. For these and other reasons, much of the discussion of poverty programs in this section encompasses the entire economy, not just the farm sector.

GENERAL RURAL POVERTY PROGRAMS

The first significant public efforts specifically to help the rural poor were initiated in the 1930's under the New Deal. Programs languished during the 1940's as a full employment economy and the demands of war blunted the demands to help the economically disadvantaged. Strong commodity programs and 100 per cent of parity, though of benefit only to commercial farmers, also diverted attention from the rural poor in the 1940's.

The Eisenhower administration recognized the problems of the rural poor in the 1950's, but consequent programs had a nominal impact on the problem. Programs for the poor multiplied during the Kennedy and Johnson administrations, but the impact of these programs was not proportional to their number.

Programs of the 1930's

The Resettlement Administration was established as a separate agency in 1935 and operated for two years. Its activities included (a) purchasing very large farms and dividing them into modest size units; (b) purchasing small farms, consolidating them, and reselling them as economic units; (c) resettling farmers from whom it had purchased farms, and (d) "rehabilitating", with loans and grants, farmers who lacked resources to earn a satisfactory living. The Resettlement Administration made loans and grants of nearly $300 million to needy farm families.

The Farm Security Administration(FSA) carried on many of the Resettlement Administration activities, and was established by the Bankhead-Jones Farm Tenancy Act passed in 1937. Activities of the Farm Security Administration included (a) loans to tenants to purchase farms, (b) "rehabilitation" loans to farm families who could not obtain commercial credit at reasonable terms to purchase farm production supplies, and (c) submarginal land retirement. Many poor farm families were reached by the program, an estimated 232,000 in 1943 alone (Cochrane, 1965, p. 195). Nevertheless, the program was too radical for conservative groups in Congress, and the program was reorganized out of existence by 1946 legislation.

The above government programs, the first to focus specifically on problems of farm poverty, helped many farm people but were much too small to deal with the enormous problems. The program foreshadowed future public programs that suffered from the same malady.

The Farmers Home Administration (FHA) replaced the Farm Security Administration in the FHA Act of 1946. The FHA continued only the FSA's less controversial features, and more carefully specified the limitations on loans and operating policies. The new act specifically forbade FHA activities in cooperative farming and the operation of farm labor camps.

The Farmers Home Administration, established to finance farmers unable to obtain adequate credit from other sources, continues to operate under the same basic framework as established in 1946. Technical management assistance is often provided with loans. In 1967, the principle indebtedness of the farmer who was borrowing could not exceed $60,000. The maximum term was 40 years; interest was approximately five per cent. The Federal subsidy to support farm and rural housing loans from 1961 to 1966 ranged from $349 million to $160 million per year. One view is that a comparatively small portion, $50 million of FHA loans or grants, annually benefited the poor in rural society (Bonnen, May 1966, p. 454).

The FHA is now authorized to make loans to public and nonprofit organizations in "rural" towns (up to 5,500 population) to develop their domestic water supply and waste disposal facilities.

Fifty-year loans up to $200,000 could be made by the FHA in 1967 to private non-profit corporations and cooperatives to construct housing for low-income senior citizens. The FHA could also make loans to public agencies and non-profit organizations in rural renewal areas for the purpose of stimulating the economy. These loans can be made for feasibility and engineering studies; for purchase of land tracts to consolidate for flood control or soil conservation; for improving the water supply, recreational facilities, timber, or building access roads; and for purchase and development of grazing areas.

The Rural Electrification Administration was established in 1935, a time when only 11 per cent of the farms in the U.S. had electricity. By 1966, 98 per cent of all farms were electrified. Electricity has contributed much to the quality as well as to the economic productivity of farm life. By improving communication and the level of rural living, electrification has done perhaps as much as any Federal program to alleviate rural poverty.

The Eisenhower program

Economists had long recognized problems of poverty in agriculture, but their efforts and analyses began to reach a telling pitch by the mid 1950's. Perhaps partly as a result of these analyses, the Rural Development Program was started by President Eisenhower in 1955. To develop agriculture's human resources, a number of lines of action were proposed. The general approach was to be primarily educational and developmental. Local people would be urged to form rural development committees in selected counties in order to outline and to guide the local development program.

Research, extension and technical assistance were to be focused to a greater extent than in the past on low income rural areas, on their problems and opportunities. Private, cooperative and government loans were to be expanded. Nonfarm employment information was to be disseminated, and the necessity of outmigration confronted. Industrialization, vocational education, and health services for rural areas were to be expanded.

Congress allocated only $2 million to operate the RDP, and gave the FHA some additional lending authority to operate under the program. In 1960, it was reported that 210 counties participated in the development programs, and that 18,000 new full-time jobs were created in the year as a result of industrial growth and new business. Nevertheless, in Cochrane's judgment "the Rural Development Program never really moved out of the pilot stage ... in general the Rural Development Program barely touched the hard-core underemployment-poverty problem in rural areas" (Cochrane, 1965, p. 202).

Providing farm operators with low interest capital through, for example, the Farmers Home Administration and know-how through the Extension Service to expand their farming units is an attractive solution to low income problems but has had important drawbacks. For the marginal operator who needs special help, it is difficult to determine whether credit is being granted to form a viable economic unit that will provide a satisfactory living, or is being granted to perpetuate an uneconomic farming unit. More important is the fact that even with reasonable help with credit and management, most farms in depressed areas cannot become economic units. Farm surveyed in the Quachita Highlands of Eastern Oklahoma (part of Ozarks) averaged 220 acres (Back and Hurt, 1961). With good management and the most efficient allocation of resources among conventional products (specialty crops excluded), a 220 acre farm would provide a net income of approximately $1,400. Thus, within current farm boundaries, there was no feasible approach to bring incomes to satisfactory levels. Even a 720 acre farm composed of typical resources for the area but with above average management would provide a net farm income of only $3,000. Two conclusions were apparent--first that farms must be expanded, and in the process over two-thirds of all farms need to be consolidated with existing farms; and second that numerous farm operators need substantial off-farm employment either on a full-time basis or part-time basis. These results are consistent with those of other studies (Booth, 1960; Tweeten and Walker, 1963).

The nation discovers poverty: Programs of the 1960's

Under the administration of President Kennedy, the Rural Development Program was reorganized and named Rural Areas Development (RAD) in 1961. As with its RDP predecessor, the RAD program assumed that the local community would provide the leadership and initiative for the development process. RAD like RDP was basically a planning and coordinating program, designed to focus some of the activities of existing agencies on alleviation of poverty.

The Rural Community Development Service was formed in February, 1965 to provide leadership for the USDA in rural area development programs. Technical Action Panels operated at local levels to provide leadership in development activities. USDA representation usually consisted of local officers of the Farmers Home Administration, the Soil Conservation Service, the Agricultural Stabilization and Conservation Service, and the Extension Service.

The RAD effort from 1961-1966 entailed organization and promotion of an estimated 20,000 projects ranging from community facilities to industrial parks (USDA, October 1966, p. 70). The advent of RAD was not met with a significant budget increase, hence RAD was essentially a continuation of the RDP pilot project. Cochrane's statement about RDP can also be applied to RAD.

Two additional domestic economic development programs were initiated during the administration of President Kennedy to combat poverty through reduction of unemployment. The Accelerated Public Works Program was designed to stimulate economic activity in depressed rural areas, primarily through improvements in social overhead. This improvement in public facilities not only provided direct employment, but also made depressed areas more attractive to industry. Congress appropriated $850 million in 1962 and 1963 for the program. It was estimated that 220,000 man years of employment would be provided by the program in its first 2.5 years of operation (Cochrane, 1965, p. 205).

The Area Redevelopment Administration (ARA), established by the Area Redevelopment Act of 1961, was in the Department of Commerce. The ARA provided (a) loans to support job-creating commercial and industrial enterprises, (b) grants and loans for public facilities, (c) technical assistance to bridge the knowledge gap, and (d) retraining programs to fit workers to new jobs. An estimated $126 million in loans and grants were made or approved in fiscal 1962 to finance enterprises and development projects. An estimated 65,000 jobs were created in rural areas under the ARA program (The White House, 1967, p. 112).

The Manpower Act of 1965 transferred, as of July 1, 1965, the training provisions of the Area Redevelopment Act to the Manpower Development and Training Act (MDTA). The Economic Development Administration has absorbed other programs of the ARA.

Economic Development Administration

By 1965, the ARA claimed it had been instrumental in starting 1,487 community industrial development projects, and had stimulated investment of $260 million in rural areas. But evaluation of ARA activities indicated that too many projects were very small in scope and required too high investment of talent and money per job created. One worthy objective in reconstituting the ARA into the Economic Development Administration in 1965 was to place greater emphasis on regional development plans. Top priorities for assistance went to those areas and districts which had high unemployment and low per family incomes. Accomplishments of the EDA in 1967 included initiation of 472 public facility development projects at a cost of $200 million, training programs started for 17,000 workers at a cost of $27 million, business loans to 63 firms in 55 areas at a cost of $51 million, technical assistance and research in 105 areas for 236 projects at a cost of $13 million, and planning grants totaling $6 million to establish over-all economic development plans in areas, districts and regions (U.S. Department of Commerce, 1967).

The concept of a viable economic area is embodied in the Economic Development Regions established under authority of the Public Works and Economic Development Act of 1965. By the end of fiscal 1967, five Economic Development Regions had been designated: Upper Great Lakes (northern regions of Minnesota, Wisconsin and Michigan) New England, Coastal Plains (eastern parts of North Carolina, South Carolina, and Georgia) Ozarks, and Four Corners (most of Utah, Colorado, Arizona, and New Mexico). The Economic Development Districts must include at least two "redevelopment areas" with sufficient population and resources to foster economic growth. Each district includes an "economic development center" that contributes to the economic revitalization of each District's redevelopment areas. The redevelopment areas and center are eligible for a full range of economic assistance. In addition, redevelopment areas in the District are eligible for a 10 per cent bonus on grants for public works projects. Initial action in creating a District must be taken by a state or by a state agency.

Technical assistance is provided to redevelopment areas by the Economic Development Administration. This assistance, to help distressed areas understand their problems and economic potential, may be in the form of (a) studies to identify area needs or to solve industrial and economic problems, (b) grants-in-aid amounting to 75 per cent of the costs of planning and administering local economic development programs, and (c) management and operational guidance for private firms.

In addition to funding by the Economic Development Administration of Economic Development Districts, two other geographic groupings may qualify for benefits following submission and approval of an overall economic development program. These geographic groupings are Redevelopment Areas composed of counties, labor areas, or large cities characterized by high unemployment or low family income; and Multistate Development Regions which are groupings of states or parts of states with economic problems too complex to be solved locally. The Secretary of Commerce is authorized to designate a Multistate Development Region. Regional commissions are then formed for each region to assist the Secretary of Commerce in planning and coordinating economic development programs in the Region.

The Public Works and Economic Development Act of 1965 also provided for low-interest, long-term loans to encourage and help private businesses establish plants in redevelopment areas. The loans allegedly are for projects that cannot be financed through commercial banks or other private lending institutions. The loans can be to private enterprises or local development companies formed to lease facilities to private firms. Loans may pay up to 65 per cent of the total project cost, and may run for 25 years at interest rates commensurate with Federal borrowing costs. In some cases, the Federal government provides guarantees of up to 90 per cent of the unpaid balance of working capital loans obtained from the Economic Development Administration.

Appalachia program

The Appalachian Regional Development Act of 1965 established an integrated Federal-state development program for Appalachia -- an area comprised of some or all of 12 states. A federal-state commission was established to formulate a comprehensive development plan. By 1967, steps taken by the Commission had led to construction of highways that eventually will form a 2350 mile road network; construction of hospitals, nursing homes, clinics and health centers; and construction of 40 vocational and technical schools.

Operation Mainstream and New Careers

Public employment to cope with mass unemployment is not new -- in the 1930's as many as 3.7 million were employed at one time under emergency programs of the Federal government. Public service employment in 1967 totaled only 500,000 persons (NACRP, 1967, p. 19). Most of these persons are on education or other projects not specifically

designed to provide public employment. Two specific programs of public employment are described below.

Persons 22 years of age or over, unemployed and below the poverty income threshold are eligible for public employment in "Operation Mainstream". The program attempts to provide the chronically unemployed permanent jobs at decent wages while improving towns and depressed rural areas. Projects include improving parks, rehabilitating housing; and extending education, health and social services. The program provided public employment for only 8,100 in 1967, with about half the funds going to rural areas.

"New Careers" is a program of public employment for the hard-core unemployed, and is designed mainly for urban areas -- only 12 per cent of the funds go to rural areas. Projects were funded to provide only 2706 work opportunities in 1967. The program is similar to Operation Mainstream, but has greater emphasis on trainees taking over some of the routine jobs from "overworked" professionals in hospitals and other places.

Miscellaneous programs

The Commodity Distribution Program was authorized by the Agricultural Adjustment Act of 1949. This program increased the market for domestically produced food acquired under surplus removal and price support operations. Available foods may be donated to nonprofit school lunch programs, summer camps for children, needy Indians on reservations, charitable institutions, and state and local welfare agencies. The USDA delivers the food in carload lots to points designated by the state. During the year ending June 30, 1966, 1.8 billion pounds of food were donated by the Federal government. State and local governments pay additional costs of storage and distribution. If a county or city can demonstrate that it cannot finance a food donation program, the Office of Economic Opportunity may provide assistance for such activity under the Community Action Program. It is disturbing to note that 1959 data show that the incidence of participation among counties in food donation programs was greater for those with high income than with low income (cf. USDA, October 1966, p. 35).

Federal funds and commodities assist primary and secondary schools in serving nonprofit lunches. Three out of four children are in schools affiliated with the program; an estimated 18 million children received lunches each day under the program in 1965-66 (NACFF, 1967, p. 165). States in which average income is low are compensated at a higher rate per school lunch than are states in which income is high. In addition, the Special Milk Program of 1954 subsidizes milk for children in public and private schools.

There are indications that the school lunch programs are not reaching the poor: "About 30 per cent of all rural schools have no facilities for preparing lunches, and hence cannot participate. Less than one-third of all school children from families of less than $2000 (annual income) receive either free lunches or lunches at reduced prices" (Clawson, 1967, p. 1231).

The Food Stamp Act of 1964 authorized families to exchange a portion of their income for food stamps worth more than that income portion. The value of stamps received is designed to provide an adequate diet. Low income families spend a higher percentage of their income for food than do high income families. It follows that requiring a prescribed percentage of income to be exchanged for food stamps should lead automatically and ingenously to participation and welfare benefits for poor families. The program will gradually be extended to all areas of the country that want it.

Again it is disturbing to note that in 1959, the incidence of county participation in the Food Stamp Plan was greatest among counties with high median income per family (USDA, October 1966, p. 35).

The Consumer and Marketing Service of the USDA administers both the food donation and food stamp programs. During May of 1967, some 3.5 million persons in the U.S. took part in the Commodity Distribution Program and an additional 1.7 million persons took part in the Food Stamp Plan. The Food Stamp Plan is expanding rapidly. At the end of fiscal 1967, 840 areas in 41 states and the District of Columbia were participating. The average recipient received free coupons valued at about $6 each month (NACFF, 1967, p. 166).

A new housing program is similar to the Food Stamp Plan. Private non-profit or limited profit corporations offering decent housing to low-income families are paid the difference between the "fair market rent" of a new or rehabilitated housing unit and the rent paid by the tenant family--25 per cent of the family's income (Economic Report, 1968, p. 152).

PROGRAMS OF TRAINING AND EDUCATION

Some of the most promising programs to raise income of poor people focus on training and education. Many of these programs were not designed specifically for the rural poor, but have a sufficient impact on economically disadvantaged rural people to warrant their inclusion in this section.

Elementary and Secondary Education Act of 1965

The Elementary and Secondary Education Act of 1965 offers Federal help for rural areas to improve their educational facilities. Aid to deprived children is the largest program under the legislation, although the Act also provides funds for libraries, supplemental educational centers, research, and for strengthening the State Departments of Education (USDA, October 1966, p. 24). Aid to states for deprived children is based on a formula applicable to all states. The allocation to each school district within each state is determined by the state's current expenditures per school child and the number of school-age children in the district who come from families with incomes under $2000 a year, or from families receiving over $2000 a year from "Aid to Families with Dependent Children". The formula results in a regressive distribution of benefits. The maximum allocation per child is $309 for the one-tenth of counties having the most rural poverty (Table 9).

Poorer counties spend less on education per student, and have a lower ratio of education expenditure to per capita income than do the richer counties. It is unfortunate that the Elementary and Secondary Education Act of 1965 contributes to the desparity in education expenditures among rich and poor counties (Table 9).

Funds for libraries and instructional materials are allocated among the states according to the enrollment in elementary and secondary schools. Distribution of funds to local districts is left to the states.

In fiscal 1966, nearly $1.2 billion was allocated to local educational agencies in over 17,000 school districts to assist them in expanding and strengthening programs for educationally deprived children. About 2.5 million children were benefited in the 1966 summer program; 8.3 million in the fall school session.

Title I funds were used for children from preschool levels through grade 12. Emphasis was on remedial reading and other such programs, but funds could be used for such diverse purposes as clothing, dental care, food and equipment. A review of the Title I program reported a most disappointing finding: "the failure of most schools to identify and attract the most seriously disadvantaged children" (The White House, 1967, p. 94).

Title II funds were used to purchase books and other instructional material. Title III funds were used to support "innovative" and "creative" projects in education.

Vocational training

Vocational training in rural areas traditionally has been in agriculture and home economics, supported by funds from the Smith-Hughes Act of 1917 and the George Barden Act of 1946. Growing realization that many farm youth must take their place in nonfarm employment has led to greater emphasis on shop skills in vocational agriculture, and to a series of entirely new vocational training programs.

The Manpower Development and Training Act (MDTA) of 1962 provides Federal support for vocational training for unemployed and underemployed workers. Members of farm families with less than $1200 annual income are considered "unemployed" under the Act, and are eligible for training allowances. Training is in farm or nonfarm skills, with monetary allowances for subsistence and transportation for those who need assistance while in training.

In 1966, an estimated 163,000 persons were enrolled in institutional training and 37,000 were enrolled in on-the-job training, (The White House, 1967, p. 117). Only 2.5 per cent of the institutional trainees and only 1.3 per cent of the on-the-job trainees were farm workers prior to training. Trainees of farm background were older and had less formal education than other trainees. Few of these farm workers received training in farm skills; most were trained for nonfarm occupations.

The Vocational Education Act of 1963

Federal grants to states on a matching basis for vocational education are made under the Vocational Education Act (VEA) of 1963. Eligible trainees include high school students (dropouts and graduates), and adults who require retraining to hold or upgrade their present jobs. Numerous types of nonagricultural technical education are included. Agricultural training under the VEA is not generally designed for persons who return to the farm, but includes courses in related occupations such as food processing, distribution and service industries.

In 1965, 41 states built or authorized 125 area vocational-technical schools at a cost of $55 million in conjunction with the VEA. An additional 1,100 such schools have been authorized and allegedly will be available by 1975. An estimated half million adult rural people were reached by vocational courses under the VEA in fiscal 1965. Less than one-fourth of the training approvals under the VEA were for rural residents, and most of the vocational schools are located in urban communities. Since 28 per cent of the U.S. residents were rural, the incidence of training under the program was slightly lower for rural than for urban residents.

The VEA provided about $118 million annually through fiscal 1966 and $225 million thereafter for grants to states on a matching basis. The Act also provided $50 million in fiscal 1966 and $35 million thereafter for experimental work-study programs and for construction and operation of residential vocational schools (Bonnen, April 1966, p. 61).

Schooling under the Economic Opportunity Act of 1964

Several vocational programs are offered under the Economic Opportunity Act of 1964. The programs are administered by the office of Economic Opportunity (OEO) and other Federal agencies (Table 10). The Neighborhood Youth Corps (NYC) program was established under Title I and provides paid-work experience for youth 16-21 years of age. Of 1477 NYC projects operating in fiscal 1966, more than a third were rural. Of the half million enrollees, an estimated one-fourth were rural -- roughly the same percentage as under the MDTA and VEA programs. The trainees or rural residence are largely from small towns rather than farms. The young people in the NYC remain in their home environment while gaining job proficiency through full-time work or while supplementing their income with part-time work in order to remain in school.

Table 10. Obligations by OEO, Fiscal Year 1966*

Program		Obligation (Dollars)
Community Action Program (CAP)	6,246	653,500,000
This includes:		
Upward Bound	224 Institutions	
	20,418 Students	27,986,000
Legal Service	157 Projects	27,512,000
Foster Grandparents	33 Projects	5,089,000
Migrants (Title III-B)	66 Grants	25,285,000
Neighborhood Multi-Service Centers		51,130,000
Indian Reservation projects	78 Grants	
	100 Indian tribes	12,000,000
Health Centers	8 Grants	9,296,000
Head Start		
Summer:	1,645 Sponsoring agencies	
	573,000 Children	97,000,000**
Full year:	470 Grants	
	178,000 Children***	83,000,000
Job Corps		303,500,000
28,533 youths in 105 centers (25,927; 2,606 females)		
Centers: 86 conservation; 8 men's urban; 11 women's urban; 1 special		
VISTA****		15,900,000
Neighborhood Youth Corps (Labor)		271,000,000
1,477 Projects	528,000 Authorized enrollment opportunities	
Adult Basic Education (HEW)		35,500,000
45 State plans approved	9 State plans pending	
Work Experience (HEW)		112,400,000
147 Projects	38,261 Trainees	53,487,000
127 Renewals	46,559	58,913,000
Rural Loans (Agriculture)		
17,073 Individual loans		27,264,000
391 Cooperative loans		5,000,000
Small business loans (SBA)		
1,651		17,000,000

*Data from (OEO, 1967, p. 9).

**Plus an additional $14,000,000 obligated in FY 1967.

***Includes 18,000 children in follow-through programs.

****	Projects	Volunteers
Field Service:		
Migrants	23	271
Indian Reservations	56	301
Rural	86	1,172
Mental health and Retardation	12	93
Job Corps	31	44
Urban	89	658
Hold Status	—	—
In training	—	1,053

Recent amendments in the program authorize enrollment in NYC in-school programs at age 12 instead of having to wait until 16, as previously required. This change was intended to reduce school dropouts among the disadvantaged. Also it is now possible for the NYC to pay out-of-school enrollees for time spent in counseling and training--services of special importance for dropouts (The White House, 1967, p. 96).

The Job Corps was authorized by Title I of the Economic Opportunity Act, and was established to provide youth characterized by low income, lack of employment and inadequate job preparation with some education, vocational training and work experience. The youth are sent to urban training centers or rural conservation centers located, unlike the NYC, often at some distance from the youth's neighborhood. The Job Corps and NYC together were authorized to spend over one-half billion dollars in fiscal 1966. More than 30,000 young men and women were enrolled in late 1966 in 106 Job Corps Centers. A majority of these were conservation centers but the number of urban centers is growing (Table 10).

Job Corps applicants must be young (16-21 years of age), undereducated and jobless. Lack of motivation, unsatisfactory family background and other special handicaps frequently characterize persons selected for the Corps. Despite such handicaps, follow-up studies show that two-thirds of the former Corpsmen (including dropouts) were employed after training and at wages related to the length of stay in the Corps (The White House, 1967, p. 97). Considering the backgrounds and personal problems of this previously hard-core unemployed group, the record of the Job Corps can be viewed with measured optimism.

The largest and perhaps most enthusiastically endorsed of the Community Action Programs under Title II of the Economic Opportunity Act is Operation Head Start. Assistance is provided to pre-school centers for children of limited opportunity who will later enter kindergarten or first grade. The program involves teachers, parents, doctors and social workers in an effort to overcome deficiencies that would lead to underperformance in school and society. The pupil-teacher ratio is very low, and costs run about $1,000 per pupil per year. During fiscal 1966, 573,000 youngsters were enrolled in summer programs and 178,000 in full-year programs. In some cases, all-day care was provided so that the mothers could work and leave relief rolls. Only one-fifth of the 2.5 million youngsters 3-5 years old living in poverty were enrolled in the program in 1966.

Follow-up studies show that in a "traditional" elementary school environment, the Head Start children lose the gains achieved. This is because the primary schools are not designed to build on the special progress made in preschool programs. It is also because our middle-class teaching methods are only slowly being revised and oriented to compensate for lack of verbal and cognative skills and of functional discipline that characterize children of the poor. Programs are needed to improve instruction in all grades of primary schools in poverty areas and to bring more youngsters into Head Start at an early age. Head

Start programs now include few farm children, and should be expanded in depressed rural farm areas.

In addition to project Head Start, the Community Action Program supports projects operated by welfare agencies, schools, churches, and other groups to deal with problems of inadequate job opportunities, housing, education, health, etc. (Table 10). Neighborhood centers operated under the CAP provide employment services, day care for children of working mothers, legal services, and health services. An estimated 100,000 poor were employed in the CAP itself in fiscal 1967. Specialized job training was provided for an estimated 25,000 under the program in the same year (The White House, 1967, p. 95). The operation of the neighborhood centers and other aspects of CAP were largely confined to the cities. The CAP in total had obligated expenditures of $653 million in fiscal 1966.

The Adult Basic Education program was established under Title IIB of the Economic Opportunity Act of 1964. The program was for persons age 18 and over who lacked the basic skills necessary to qualify for better jobs or for occupational training. Remedial programs included instruction in reading, writing, and arithmetic. Title IIB was repealed by section 315 of the Elementary and Secondary Education Act. Title III of the latter Act authorized a program generally similar to Title IIB of the 1964 Act. Powers of the OEO Director under Title IIB were delegated to the Secretary of the Department of Health, Education, and Welfare.

Title III of the Economic Opportunity Act includes financial assistance for migrants and other seasonal farm employees and their families. Projects include accelerated school programs to shorten the school year for children of migrants; adult education in literacy and other basic skills, remedial summer school programs for youth, vocational training for adults, and day-care centers for preschool children. An estimated 150,000 workers and their dependents had been served in 27 states under the program by the end of 1965 (cf. USDA, October 1966, p. 26).

Title V of the Economic Opportunity Act of 1964 includes a Work-Experience Program for the needy and unemployed, including part-time and seasonal farm workers, who are receiving public assistance. For fiscal 1966, $112 million was obligated to support community work and training projects and to simultaneously create work experience, income, and training for the needy. The Work-Experience Program provided job experience and training for 84,820 unemployed heads of families and other persons on public assistance in fiscal year 1966. The projects are conducted by state and local government welfare agencies with financing from the Federal Government. Those who are illiterate may first complete a basic education program before receiving experience in an occupation. The length of training under the Work-Experience Program averages about nine months, after which the trainees may be placed on a job, referred to the MDTA for further training, or returned to the welfare rolls. Nearly 12,000 enrollees in the Work-Experience Program, who had previously received general assistance or aid to families with dependent children, became self-supporting between October 1963 and December 1964, saving an alleged $1.8 million per month in public assistance (The White House, 1966, p. 70). While work-experience projects are unavailable to most farm families, the projects can be of real benefit to seasonal farm workers who are supported by public assistance part of the year.

Miscellaneous schooling programs

Numerous programs in addition to those listed above are available to residents of impoverished rural areas. The Upward Bound program under the Office of Economic Opportunity is a national pre-college program of intensive education designed to motivate secondary students, who have been handicapped by cultural and educational deficiencies, to attend college or otherwise reach their academic potential (Table 10).

A number of programs financially assisting disadvantaged youth to attend college are available under the Higher Education Act of 1965. The 1965 Act also provides for a National Teachers Corps. The corpsmen are generally graduate students at a University who provide supplementary teaching in elementary or secondary schools in areas with a large proportion of disadvantaged pupils. In isolated rural areas, an experienced teacher may be provided to supplement the local school program.

VISTA, Volunteers in Service to America, is another program under the Office of Economic Opportunity. Following a six-week training period, the volunteers usually go out in teams for a period of one year to work with the disadvantaged in for example Job Corps camps, migrant worker communities, or Indian reservations. The Volunteers, who often perform teaching assignments, receive only $50 per month in addition to board, room, and health care.

STATE AND LOCAL PROGRAMS TO FINANCE INDUSTRIAL DEVELOPMENT

Local industrial development bonds

States now rely on three basic programs to finance industrial development (Stinson, 1967). The most popular is the local industrial development bond. A plant for a new firm is constructed with funds obtained from a municipal bond issue. The plant is leased to the new firm at an annual rate necessary to retire the bonds, after which the title to the plant is usually transferred from the local government to the firm. The advantages to the firm are that capital is obtained at low cost because municipal bonds are tax free, and that property taxes usually are not charged while title to the plant is held by the local government.

Two types of development bonds are used. One is the general obligation bond, generally characterized by liability of the community for any unpaid balance (should a firm default on payments), by statutory debt limitations, and by exemption of plants so financed from local property tax. In 1966, there were an estimated 43 issues totaling $20 million in 10 states, eight of them in the South.

A more popular type is the local revenue bond, with an estimated 94 issues totaling $485 million in 1966. At least 31 states use this system to finance industrial development. The local government is not required to retire local revenue bonds if the firm leasing a plant defaults. Because such bonds are not bound by statutory debt limitations, large issues can be floated by small communities. The general obligation bond has advantages for small firms with poor or unestablished credit ratings; the local revenue bond has advantages for the large, established firms which desire low cost financing.

State industrial finance authority

A second method for financing industrial development is the state industrial finance authority. Under the Pennsylvania Plan, the state industrial development authority is authorized to make loans out of the state general revenue fund to local nonprofit development corporations for 40 per cent of industrial facility costs in return for a second mortgage on the facility. Under this plan, the financing does not receive the freedom from Federal taxes of municipal bonds, and does not require local subsidy through exemption from property tax. In addition to Pennsylvania, Kentucky and Arkansas use the Plan. Pennsylvania has the only sizeable program however, with 576 loans totaling $104 million outstanding at the end of 1966.

The Oklahoma Plan operates similar to the Pennsylvania Plan, except that bonds rather than state general revenue fund money is used to support local industrial development; hence financing is not limited by shortages of general revenue funds. The Oklahoma plan is used in Oklahoma, New York, Maryland, New Hampshire, and Alaska. By the end of 1966, 295 loans had been made totaling $39 million, about half in one state, New York.

Loan guarantee

Under a third financing method, a loan guarantee plan, the local industrial development corporation is financed solely through private sources and decides what facilities will receive assistance. The "standard" rate of interest is charged. But the rate tends to be low because of reduced risk--the state insures repayment of up to 90 per cent of the loan in return for a small service charge. Five New England states and Delaware use loan guarantee systems. A total of 105 loans, some dating back to 1959, for a total of $61 million had resulted in no defaults as of 1967.

Little study has been devoted to the ability of the various public financing programs to attract industry. There are indications, however, that for small, inadequately established firms, public financial support is a decisive factor in location.

COSTS AND EFFECTS OF WELFARE PROGRAMS

A total of three million U.S. workers were unemployed in 1966. In rural areas alone in 1966, there were two million man-equivalent years of underemployment by even the most optimistic standards; most of it unfortunately is not included in the above figure on unemployment. Federal training opportunities existed for only .7 million in 1966 and 1967 (Table 11). Federal training programs are not yet large enough to have a telling impact on national unemployment.

Table 11. Training Opportunities, Fiscal Years 1966-67*

Program	Number of trainees	
	1966	1967**
	(1000)	(1000)
Manpower Development and Training Act Program		
Institutional training	160	125
On-the-job training and other	113	125
Job Corps	10	31
Neighborhood Youth Corps:***		
In-school	106	125
Out-of-school	55	60
Summer	209	165
Work Experience	64	46
Adult Work Program		25
Special Impact		8

*Data from (Economic Report, 1967, p. 109).

**Estimates.

***Each position may be occupied by more than one person in the course of a training period, since trainees often do not occupy positions for the full period.

Impact of welfare programs on agriculture

Funds for farm commodity programs have averaged $4 billion annually in recent years. The benefits go to commercial agriculture, and have largely eluded the really poor. Funds from all public programs for the poor in agriculture total only a few hundred thousand annually. Most of the programs to benefit the farm poor are part of national programs to help those in poverty, rural and urban alike. Anti-poverty programs in fiscal 1963 directly created 35,000 rural jobs and indirectly added another 35,000 due to multiplier effects (Cochrane, 1965, p. 213). This was a very small dent in total rural underemployment of perhaps two million man years.

Total national welfare outlays

Social welfare expenditures in the United States totaled $78 billion in 1965, 51 per cent from Federal sources and 49 per cent from state and local sources (U.S. Department of Commerce, 1967, p. 280). As recently as 1955, total social welfare expenditures were $32 billion, and the Federal portion was 44 per cent. Thus all welfare outlays are rising rapidly, and Federal outlays are increasing faster than state and local outlays. However, funds for all welfare purposes as a proportion of all government expenditures have remained approximately 40 per cent for several years.

"Public assistance" accounted for only eight per cent of all welfare expenditures in 1965. Categories such as social insurance (36 per cent), education (36 per cent), and veterans programs (eight per cent) are not narrowly focused on the poor, but accounted for 80 per cent of all so-called "welfare" expenditures in 1965. It follows that total social welfare expenditure, $78 billion, is a highly inflated estimate of funds to alleviate poverty.

Federal welfare outlays

Measures of Federal expenditures for welfare depend on what definition of welfare is used. Data in Table 12 include a number of programs such as social security which benefit many people who cannot be classified as "poor". Under this broad classification, Federal outlays for welfare programs were $34 billion in 1963 and $42 billion in 1966. The portion most narrowly focused on poverty, public assistance, totaled only $2.4 billion in 1963 and $2.8 billion in 1966. Considering only the outlays that are largely directed to the poor, it is concluded that Federal aid to the poor doubled from 1960 to 1966. It increased from an estimated $10 billion in 1960 to $22 billion in 1966, (cf. The White House, 1967, p. 92).

Old Age, Survivors and Disability Insurance (Social Security) benefits totaled $18 billion in 1965. Approximately one-third went to the poor and another two-fifths went to households which otherwise would have been poor (Economic Report, 1967, p. 140). Much of these benefits went to the aged. Still two-fifths of the aged

2

Table 12. Federal Budget Expenditure and Trust Expenditures for Selected Welfare Programs, U. S., 1963-66*

Description	Fiscal Year			
	1963	1964	1965	1966
	($ Million)			
Rural electrification and telephone loans	342	342	392	373
Farming and rural housing loans	300	251	268	160
Area and regional development	101	401	398	156
Urban renewal and community facilities	222	306	420	446
Public housing programs	178	149	230	233
Health, labor and welfare				
Public assistance (excluding medical)	2,361	2,508	2,544	2,797
Other health services and research	1,280	1,574	1,509	1,754
Medicare and med. assistance	427	490	555	770
Economic opportunity programs	–	–	211	1,018
School lunch, special milk, food stamp	284	308	299	363
Labor and manpower	224	345	464	500
Vocational rehabilitation	140	158	214	373
Elementary and secondary	392	404	418	1,368
Higher education	428	383	413	701
Subtotal of above	6,679	7,619	8,335	11,012
Veteran benefits and services	5,186	5,492	5,495	5,023
Health, education and welfare trust (Mainly Social Security)	21,855	22,733	23,186	26,384
Grand Total	33,720	35,844	37,016	42,419

* Data from (Bureau of Budget, 1967, pp. 66, 67).

were poor in 1965. Future changes in Social Security will reduce the real number of aged actually in poverty. Better measures of poverty that account for assets will greatly reduce the recorded number of aged in poverty.

Public assistance and the role of the states

The benefits of public assistance, food stamps, and commodity distribution programs go primarily to the poor and totaled $7 billion in fiscal 1965. States establish the standards for eligibility and pay on the average 41 per cent of the cost of public assistance. The states often impose rigid rules of eligibility. Less than half the poor fall within public assistance eligibility categories. As a result of stringent state requirements, only 22 per cent of the potentially eligible recipients receive help; and for those actually on the welfare roles, payments fall far below needs as established by the state itself.

Nearly all Aid to Families with Dependent Children (AFDC) recipients either are children or are women whose family responsibilities preclude work outside the home unless child care is provided. Until amended in 1967, the law required that AFDC benefits be reduced $1 for $1 of income earned by adult members of the household. This "penalty" discouraged all but the most determined from taking jobs, because earnings would not add to income. Under 1967 legislation welfare recipients can earn up to $30 per month without loss of benefits. Beyond this level, welfare benefits are reduced $2 for each $3 of earned income. In addition, the 1967 legislation provides for day-care facilities and access to training for AFDC recipients. These changes will lead to more gainful employment in families receiving assistance (Economic Report, 1968, pp. 144, 145).

Under past AFDC programs, an unemployed father, who could not provide for his family, would sometimes desert, making it eligible for AFDC payments. A 1967 amendment makes it possible for states to make Federally aided payments to families with an unemployed father. By 1968, only 21 states had elected to join this AFDC--Unemployed Parent program and only 60,000 families were benefiting. Unemployed beneficiaries are assigned either to training or to jobs with local public agencies.

These changes improve the program, but many faults remain. The program requires administrators to make difficult decisions, such as whether the mother should care for children or place them in day-care and go to work; and whether to eliminate payments (with attendant trauma to children) to a family whose male head refuses to train or take a job. If payments are too high, AFDC encourages eligitimate births and participation by families that otherwise would have found a way to earn a living by productive employment. If payments are too low or requirements for participation in AFDC too restrictive, the chances for breaking the intergeneration cycle of poverty through a better life for children may be sacrificed. These problems will not easily be resolved. A dilemma is that many people, who see real abuses of AFDC, use the program for rationalizing opposition to really promising welfare programs that could substantially reduce poverty.

Programs such as AFDC are at odds with the enterprise creed, yet transfer payments can improve the home environment and intervene in a cycle of dependency that in some instances has lasted for generations. A recent study of second generation welfare recipients in Mecklenburg County, North Carolina, of which Charlotte is the county seat, gives some basis for optimism (How About Welfare, 1967, p. 10). Of 456 children in 100 families receiving Aid to Families with Dependent Children in 1955, only 1.9 per cent of those children who were adults in 1967 were on public relief. Only 10 per cent were unemployed in 1967. This impressive record was compiled despite the fact that of the 100 families in 1955, 33 were on welfare because the father had deserted the family, 25 families involved unwed mothers, 35 had disabled or deceased fathers, and 7 families had fathers in jail.

Wide variation exists among states in welfare assistance payments. (Table 13). States with a relatively high proportion of the elderly tend to have high welfare costs per capita. And states with low per capita income tend to give low average payments. The average payment per recipient in Mississippi on Old Age Assistance is only $32.20 compared to $110.26 in Connecticut. Multiple regression analysis using data from all states reveals that states which are most rural tend to spend less per capita on welfare, have a lower rate of welfare recipients in relation to the number of eligible people, and have lower welfare payments per recipient. A re-examination of allocation formula is called for. In some instances for example, Federal allocation of welfare funds for certain purposes is determined by the number of unemployed. Since rural farm people tend to be underemployed rather than unemployed, a revision of grant formulas to account for underemployment would create a more equitable fund distribution. Also farm people are not yet adequately covered by programs such as Social Security and workmen's compensation programs.

Taxes in the U.S. are in total slightly regressive.[1] Federal taxes are progressive, but do not completely offset the regressiveness of state and local taxes. That Federal programs of taxes and grants promote a progressive redistribution of income is shown in Table 14. In general, the poorer states such as West Virginia and Arkansas enjoyed a net gain from Federal taxes and grants. Many of the richer states, especially Delaware, Connecticut, New York and New Jersey, experienced a net loss. The data in Table 14 fail to account for huge sums of non-grant Federal spending for military, space and research purposes. This spending is proportionately greatest in wealthy states such as California, Massachusetts, and New York. It is important to emphasize that the progressive redistribution of income apparent in Table 14, among states does not mean that the Federal monies are distributed progressively within each state.

---

[1] See Table 24.

Table 13. National Averages and Range of Interstate Variation in Assistance Program Variables in 1960*

Program	Per capita expenditure			Recipient rate**			Average payment per recipient		
	Low State	U.S. average	High State	Low State	U.S. average	High State	Low State	U.S. average	High State
		(Dollars)			(Recipients/1,000 eligible)			(Dollars)	
Old Age Assistant	1.74 (Del.)	10.69	37.08 (Okla.)	34 (N.J.)	140	518 (La.)	32.20 (Miss.)	69.31	110.26 (Conn.)
Aid to Dependent Children	1.80 (Tex.)	5.83	12.33 (W. Va.)	14.3 (N.H.)	36.2	88.2 (W. Va.)	38.07 (Ala.)	110.84	170.84 (N.Y.)
Aid to the Blind	0.11 (Haw., Md.)	0.52	1.39 (Pa.)	.118 (Conn.)	.602	2.912 (Miss.)	38.55 (Miss.)	72.57	118.32 (Mass.)
Aid to the Permanently and Totally Disabled	0.43 (Tex.)	1.64	4.39 (Okla.)	1.06 (Cal.)	3.82	10.75 (Miss.)	32.54 (Miss.)	65.57	128.19 (Conn.)
Combined Public Assistance Program***	5.71 (Va.)	18.63	52.80 (Okla.)	12.8 (N.J.)	32.4	80.3 (Miss.)	n.a.	n.a.	n.a.
State and Local General Assistance Programs	0.01 (Ala.)	2.39	6.56 (Ill.)	0.04 (Ala.)	3.96	7.92 (Ill.)	12.99 (Ala.)	68.75	96.66 (Mich.)

*For source of data, see (Bachmura, 1967, p. 165).

**Number of recipients out of 1,000 potentially eligible population.

***Total of 4 programs listed above. The 4 programs are jointly supported by Federal and state funds, but states differ widely in eligibility rules.

Table 14. Per Capita Redistribution of Income Attributable to Federal Grant Formulas and Federal Tax Incidence, all States, 1962*

State	Cause of redistribution: Grant formulas	Cause of redistribution: Tax incidence	Total redistribution
	(Dollars per capita)		
Alaska	+143.73	+ 6.14	+149.87
Wyoming	+ 99.95	+ 1.32	+101.27
Montana	+ 45.94	+ 8.77	+ 54.71
New Mexico	+ 35.94	+13.59	+ 49.53
West Virginia	+ 33.59	+14.47	+ 48.06
Arkansas	+ 21.61	+23.68	+ 45.29
Vermont	+ 34.80	+ 9.65	+ 44.45
Louisiana	+ 29.93	+14.03	+ 43.96
Oklahoma	+ 31.47	+11.84	+ 43.31
Mississippi	+ 15.29	+27.63	+ 42.92
Idaho	+ 28.09	+13.59	+ 41.68
South Dakota	+ 20.21	+18.42	+ 38.63
North Dakota	+ 17.67	+17.54	+ 35.21
Utah	+ 22.69	+11.40	+ 34.09
Alabama	+ 10.92	+20.17	+ 31.09
Tennessee	+ 12.35	+17.54	+ 29.89
Kentucky	+ 12.04	+17.10	+ 29.14
Nevada	+ 37.02	+12.28	+ 24.74
Georgia	+ 6.28	+17.10	+ 23.38
Arizona	+ 14.96	+ 7.89	+ 22.85
Hawaii	+ 16.37	+ 2.19	+ 18.56
Colorado	+ 17.38	+ 0.44	+ 17.82
Oregon	+ 16.23	+ 1.32	+ 17.55
Maine	+ 7.63	+ 8.33	+ 15.96
South Carolina	- 6.91	+22.36	+ 15.45
Nebraska	+ 4.44	+ 7.45	+ 11.89
North Carolina	- 8.61	+18.86	+ 10.25
Washington	+ 9.12	+ 0.44	+ 9.56
Texas	- 0.83	+ 9.21	+ 8.38
Missouri	+ 6.05	+ 2.19	+ 8.24
Virginia	- 1.99	+10.00	+ 8.10
Minnesota	- 0.84	+ 6.14	+ 5.30
Kansas	- 4.54	+ 8.77	+ 4.23
Iowa	- 7.05	+10.52	+ 3.47
New Hampshire	+ 1.62	+ 1.32	+ 2.94
Rhode Island	+ 3.31	- 4.39	- 1.08
Florida	+ 12.06	+18.86	- 6.80
California	+ 2.72	- 10.52	- 7.80

(Continued)

Table 14. Per Capita Redistribution of Income Attributable to Federal Grant Formulas and Federal Tax Incidence, all States, 1962*

(Continued)

State	Cause of redistribution		Total redistribution
	Grant formulas	Tax Incidence	
Indiana	- 13.31	+21.80	- 8.49
Michigan	- 7.20	- 1.32	- 8.52
Ohio	- 7.13	- 2.63	- 9.76
Pennsylvania	- 6.77	- 4.39	- 11.16
Maryland	- 7.78	- 4.28	- 12.06
Massachusetts	- 4.33	- 10.09	- 14.42
Illinois	- 5.39	- 10.09	- 16.02
Wisconsin	- 24.43	+ 2.45	- 21.98
New Jersey	- 16.35	- 11.40	- 27.75
New York	- 9.61	- 19.73	- 29.34
Connecticut	- 7.31	- 26.12	- 33.43
Delaware	+ 13.46	- 47.36	- 33.90

*Data from (Bachmura, 1967, p. 170).

SUMMARY AND CONCLUSIONS

The study of poverty programs suggests these inferences:

(1) One "law" of poverty programs is that benefits are regressive within the group at which they are aimed. Thus the well-to-do commercial farmers receive the major benefits from farm programs. Most programs focused specifically on alleviating poverty give a disproportionately large share of the benefits to the "poor" who need help least. The reasons are quite obvious. First, the more aggressive, knowledgeable persons within a group eligible for Federal help are most effective in obtaining Federal funds as well as in deriving income from other sources. They are also more active vocally and in the voting booth, hence are needed for the political propagation of the program.

Administering poverty programs requires personnel and operating funds. Qualified people who have the education and leadership ability to administer poverty programs are able to receive good pay doing other jobs, and can be attracted to administer poverty programs only with adequate salaries. Thus the administrative expense of poverty programs does not go to the poor.

To make Federal dollars go far to raise incomes of persons in poverty, poverty funds should be allocated to give the highest return on investment. And the return is likely to be highest by investing in persons with basic resources and personal attributes required for success in the commercial world. But these attributes often mean that the person who received aid either has already achieved some monetary success even in the poverty environment, or he would have succeeded economically even without help in the form of public subsidies.

(2) A combination of too many programs and too little funds have made Federal efforts to relieve rural poverty imaginative and promising, but often ineffective. The 1967 catalog of Federal Assistance Programs is 701 pages long (Office of Economic Opportunity, 1967). One point in favor of such lack of emphasis is that programs are so diverse and multitudinous that an economy-minded Congress can hardly rid the country of them in one impetuous act. Another advantage is that income regressiveness within poverty programs can partially be circumvented by making poverty programs more specific and sharpening their focus on individual groups.

(3) A large number of the really poor people in the U.S., many of whom are legally eligible for help, do not receive assistance for various reasons including racial discrimination. According to Clawson, "It is estimated that no more than one-fourth of all poor participate in any of these Federal welfare programs" (Clawson, 1967, p. 1231). A compounding problem is that state and local taxes are regressive. Also, economically retarded states which are least able to care for the poor often have the highest percentage of persons needing help.

(4) One hypothesis is that the income regressiveness of poverty programs tends to be proportional to the number of administrative hierarchies involved. Poverty programs of the 1930's had some success because they were administered by organizations set up especially for that purpose. There was a return to traditional organizations and local leadership in the ineffective programs of the two decades after World War II. The Economic Opportunity Act of 1964 represented a departure from the past system, with the Office of Economic Opportunity reporting directly to the President, and bypassing many of the national, regional and state channels to work directly with cities and local areas. This often has swapped rivalries, political infighting and promotion of narrow self-interests at the cabinet, state and regional level for similar behavior at the local level. Furthermore the platitude that local people best understand and can work out their problems is often overdone. Without outside financial help and guidance, impoverished areas will have limited success in catching progressive areas. Attempts to let the poor who lack proper training administer programs will only increase the administrative inefficiency.

The administration of poverty programs stands in need of much improvement. A useful rule for such programs is to consolidate programs at top levels, thereby reducing duplication and competing government activities, and to place more administrative authority within regional development districts established within the states. The latter would be intended to increase local flexibility, and place local decision making in the hands of professional administrators who know the situation and opportunities to stimulate the local economy. The local professional staff must be at least somewhat insulated from the exigencies of local politics.

(5) Under most government programs to alleviate poverty, farm interest receive a share of benefits considerably lower than the share of farmers in the population or their "fair" share based on need. Farmers undoubtedly have dissipated much of their political power on commodity programs. These do not benefit the poor, however. An increase in funds to ameliorate rural poverty can focus on enlarging programs such as OEO that are part of a national effort. Or they can focus on enlarging programs of the U.S. Department of Agriculture. The political power structure supporting agriculture is heavily oriented to commercial farmers, and Federal programs have too often bypassed the farm poor.

Basic factors underlying the political impotence of the rural poor are that: They have no effective political pressure group working for them; they are not prone to organize as are commercial farmers; they do not riot or use violence as do the urban poor; they either do not vote or exhibit unsufficient switch voting to attract the eyes and ears of politicians; and they do not have funds to make their case before the American people in newspapers, television, and other media.

Legislators with predominately rural constituencies often have not supported effective poverty programs because some of their constituency would be lost by outmigration, because they fear Federal control of schools (integration), and because the rural poor pack little political muscle.

In all likelihood the economically disadvantaged will remain the politically disadvantaged. Yet society increasingly recognizes that the urban poverty problem is tied to the disadvantaged in the rural area, since the rural poor migrate to urban areas and bring their problems and deficiencies along. Out of the recognition may come adequate programs for rural areas supported by enlightened farm legislators and urban legislators who see the connection between the invisible rural poor and the highly visible urban poor.

There is talk of spending billions to rebuild the central cities. It would be unfortunate if such efforts only "gild the ghetto" and omit the two-thirds of the poor who reside outside the central city. Ghettos already are overcrowded. There is a need to move people from them, and not cause them to attract more of the millions of future migrants. Census data show that rural Negroes largely migrate to the metropolitan cities of the North and Far West. The social cost of dealing with poverty would likely be less if more rural migrants would settle in cities of 10,000 to 250,000, and avoid the metropolitan ghetto. Failure to recognize the silent rural poor merely because they are not adept at "public relations" (rioting) would only perpetuate past mistakes.

Part IV POVERTY PROGRAM PRIORITIES

To be effective, programs to alleviate poverty must be focused. And to have a focus, it is important to set priorities; to set priorities it is necessary to use some criterion. The criterion suggested here is cost-effectiveness. The assumption is that programs which go farthest with a given input to raise the income level of poor people are most desirable and should receive first priority for public funds.

Cost-effectiveness refers to efficient use of available means to reach a given objective. Cost-effectiveness can be expressed in several ways. One of the simplest concepts applicable to poverty programs is the public funds required to create jobs for the unemployed. Another concept is the local benefit-cost ratio defined as the income generated in a depressed community per unit of public funds spent to generate economic progress. A third concept, the social benefit-cost ratio, includes public and private costs. Benefits in the form of income generated in the local community are corrected for income lost in other areas. For example, income generated by publically induced industrialization of a depressed area may mean some loss of jobs to communities where some industry would have otherwise located.

The social benefit-cost ratio is used in this section to rank Federal programs from most to least efficient in alleviating poverty. Public and private funds to raise incomes of the poor are severely limited. Thus the social benefit-cost ratio is a felicious criterion, because it indicates which programs make limited funds go farthest to alleviate poverty. In many instances, adequate data are unavailable, and the ranking must necessarily be somewhat subjective. Hopefully, future research will provide a more rigorous basis for ranking programs.

Poverty programs, like fertilizer application, cannot elude the law of diminishing returns. Injection of public funds into a program that has high cost-effectiveness will eventually drive efficiency down to a point where other programs more efficiently utilize incremental public outlays. This principle plus uncertainty and the need to reach special groups lead to diversification of funds among programs.

FULL EMPLOYMENT

Public monies, in conjunction with induced private investment, go farthest to raise income and well being of the poor when spent on monetary and fiscal policies for full employment. Because the poor tend to be "last hired and first fired," they are highly sensitive to changes in national employment. Furthermore, the success of nearly all positive policies directly focused on the rural poor depends on the availability of jobs. It does little good to provide job counselors, employment bureaus and training centers if jobs do not exist.

National policies to establish full employment are not alone sufficient to alleviate poverty in a reasonable period. Once national unemployment is down to four per cent of the labor force, other programs become more efficient uses of funds to help the poor.

IMPROVING FACTOR MARKETS

Improving factor markets ranks just behind national full employment as a cost-effective approach to reduce poverty. Ways to improve the functioning of factor markets include (a) reducing racial discrimination, (b) strengthening the public employment service, and (c) provision of loans (or grants) to facilitate factor mobility.

Racial discrimination explains much of the high incidence of Negro poverty. Acceptance of racial equality and "color blindness" by the American public would do much to improve the economic welfare of Negroes. But even if by some miracle this idealistic situation would become a reality, problems of Negro poverty would not be over. It will take decades to acculturate many Negroes to values discussed earlier consistent with economic progress and for them to accumulate human and material assets necessary to compete successfully for high-wage jobs in society. Middle class values which are highly conducive to economic progress are only marginally accepted by Negroes isolated by discrimination. Acculturation of Negroes to values consistent with rapid economic progress is likely to remain an illusion without assimilation of Negroes into society. And assimilation of Negroes through integrated schools and housing remains an elusive target indeed, although Federal legislation has provided a major impetus.

Employment services

The Wagner-Peyser Act of 1932 established the U.S. Employment Service. The 1,900 local employment offices throughout the country are Federally financed, but are operated by the respective state employment services. The Federal government provides funds and direction in the form of data on standards of operation of local agencies, statistical and research work, and maintains an interstate recruitment program. The states do the actual placement work.

About three-fourths of all hiring in the national job market takes place without use of any employment agency, public or private (The White House, 1965, p. 159). The public employment services have participated in 15 per cent of new hiring in the nation. Studies show that it is unskilled laborers who make most use of the public employment service (Secretary of Labor, 1966, p. 79). In 1964, 6.3 million nonagricultural placements were made, of which two million were of three days or less duration. Farm placements totaled 7.1 million, over half of these of short duration reflecting the seasonal nature of farm activities.

Data reveal that farm people who move long distances rely mostly on friends or relatives for information, and as a consequence are uncertain about the availability of jobs or facilities upon arrival. In an Indianapolis study, two-fifths of the Northern whites reported they knew that a particular job or kind of job was available for them when they moved to the city. In contrast, less than one-tenth of the Negroes and Southern whites reported this degree of assurance (Smith, 1956, p. 816). It is not surprising then that half of the farm migrants from the South to Indianapolis were dissatisfied to the extent that they were hoping or actively planning to return to farming (Smith, 1956, p. 820). High turnover rates, especially among Southern whites, discouraged employers from training workers.

The Federal-state cooperative employment service has made a number of changes to increase its effectiveness. These adaptations include testing and counseling programs, electronic data processing, intensive studies of labor supply and demand in local areas, and specialized employment centers. Over 8,000 groups of migrant farm workers have been fitted with a full schedule of jobs through the Annual Worker Plan. The Federal-state employment service also maintains close liaison with programs of the Economic Opportunity Act, MDTA, and with private groups to guide persons into jobs or training programs offering the greatest opportunities.

The Small Communities Program under the U.S. Department of Labor provides mobile employment service teams to serve rural areas in which the labor market is too small to justify a full time employment office. The program not only provides the usual services of counseling and placement, but also publishes comprehensive manpower resource reports to help the community attract new industry. The program appears to be successful, and warrants considerable expansion.

Still the employment service has many shortcomings. Interarea recruitment is nominal and resulted in placement of only 155,000 workers in nonfarm jobs outside their home community in 1964 (The White House, 1965, p. 161). The present supply of trained counselors is totally inadequate. There are no employment offices located in many of the low income rural counties. To remedy these faults, a major increase in public support for the employment service is essential. The matching of workers and jobs is becoming increasingly complex. Modern, high-speed computerized information systems; systematic job counseling beginning at the high school level; and mobile, well-staffed employment teams for rural areas are a few of the needed improvements. Furthermore, there must be increasing interaction among the employment services and agencies and firms providing general welfare assistance, education, skill training, jobs, and moving assistance.

Assisting labor mobility

Labor mobility demonstration projects conducted under the MDTA have tested and demonstrated ways to assist underemployed farm people who must move away from home to find suitable employment. With funds appropriated in 1964, grants of up to 50 per cent of moving expenses, loans up to 100 per cent, or a combination of grants and loans not to exceed 100 per cent of moving costs can be provided to unemployed workers who must migrate to a new job. This type of assistance is not new--it has been used by the Bureau of Indian Affairs since 1952; and by the Department of Health, Education and Welfare to resettle Cuban refugees.

Results of the pilot study of farm migration subsidies are still tentative, but some preliminary conclusions are available. One is that proper guidance and financial assistance can induce hitherto immobile underemployed or unemployed workers to take jobs elsewhere. The initial projects indicate that training to provide special skills is often a prerequisite to useful relocation (The White House, 1966, p. 138). While a considerable reorientation in thinking would be required, the Farmers Home Administration could reach many more farm people than the MDTA with loans and grants to help them train and locate for a nonfarm job.

EDUCATION

Education as stated before has a two-fold effect on rural poverty. It increases skills of persons, potentially raising their level of farm management and their suitability for nonfarm jobs. And education broadens the outlook of people, enhances their motivation and aspirations for higher income and living standards, and changes attitudes to those more nearly consistent with frictionless assimilation into a new environment. The central role given to attitudes in the liminal theory of economic stagnation singles out education as a key element in any program to alleviate poverty.

Much additional thought must be given to design of socially acceptable formal education to create attitudes of secular asceticism and functional activism. This subject deserves extended research in the future. A pilot project is underway in McAlester, Oklahoma, to generate an entrepreneural spirit in a group of 80 "average" adult males by formal means, but the results are not yet available. The assumption of the study is that an attitude corresponding with McClelland's "need for achievement" can be taught, and that this will in turn lead to business activity that will create new jobs (Behavioral Science Center, 1968).

In the following paragraphs, the more direct economic effects of education are emphasized, particularly the impact of education on earnings and mobility of farm people. Table 15 for farmers and farm managers and Table 16 for farm laborers and foremen suggest certain relationships between earnings and education levels. First, a consistent positive relationship exists between education and income. In the 35-54 age brackets, the lowest earning group of farmers had approximately an elementary education; the highest income group had a median education slightly over the high school level (Table 15). Second, the education level of farmers and farm managers is improving. The median education of the 18-34 age groups was over 12 years for each except the lowest income bracket. Third, the heavy concentration of farm operators and hired workers in the lower education brackets would help to explain the prevalence of socially unacceptable, low farm income. Not all of the difference between income of farm and nonfarm males can be explained by education, however. Comparing income of farm males with their nonfarm counterparts, after adjustments for education, age and cost of living, reveals that median farm income in 1959 of the average male farm worker with four years of high school fell short of his national counterpart as follows: age 20-21, $29; age 22-24, $218; age 25-29, $848; age 35-44, $1080, and age 55-64, $1654 (USDA, October 1966,

Table 15. Age, Income and Median Years of School Completed, Farmers and Farm Managers, in 1959*

	Age									
	18-24		25-34		35-44		45-54		55-64	
Earnings	Median school completed	Proportion in income class	Median school completed	Proportion in income class	Median school completed	Proportion in income class	Median school completed	Proportion in income class	Median school completed	Proportion in income class
(Dollars)	(Years)	(Pct.)	(Years)	(Pct.)	(Years)	(Pct.)	(Years)	(Pct.)	(Years)	(Pct.)
1-999	11.1	40.7	8.9	10.7	8.4	8.3	8.0	8.7	7.5	9.5
1,000-2,999	12.2	42.9	12.0	36.2	9.0	29.9	8.6	31.9	8.3	36.3
3,000-4,999	12.4	13.7	12.2	37.0	11.6	40.9	8.9	41.9	8.5	41.7
5,000-6,999	12.5	2.1	12.3	12.1	12.1	14.7	9.5	12.7	8.7	9.4
7,000-9,999	12.5	.4	12.4	2.9	12.1	4.4	9.9	3.4	8.7	2.2
10,000-14,999	**	.1	12.3	.8	12.2	1.4	10.7	1.1	8.9	.6
15,000-24,999	**	0	12.4	.3	12.3	.4	11.6	.3	9.3	.2
25,000 and over	**	0	12.9	.1	12.5	.2	12.2	.1	9.9	.1
Total		100.0		100.0		100.0		100.0		100.0

*Data from (U. S. Bureau of the Census, 1963, Table 9). Median overall schooling for farmers and farm managers 8.9.

**Too few observations for adequate estimate.

Table 16. Age, Income and Median Years of School Completed, Farm Laborers and Foreman, in 1959.*

Earnings	Age 18-24 Median school completed	 18-24 Proportion in income class	 24-34 Median school completed	 24-34 Proportion in income class	 35-44 Median school completed	 35-44 Proportion in income class	 45-54 Median school completed	 45-54 Proportion in income class	 55-64 Median school completed	 55-64 Proportion in income class
(Dollars)	(Years)	(Pct.)	(Years)	(Pct.)	(Years)	(Pct.)	(Years)	(Pct.)	(Years)	(Pct.)
1-999	9.3	54.8	5.9	32.0	5.2	32.6	5.1	32.3	5.1	41.8
1,000-2,999	10.0	37.0	7.7	46.0	6.6	44.9	6.1	44.4	6.1	42.4
3,000-4,999	11.9	7.0	10.0	17.0	8.7	16.9	8.2	14.7	8.1	12.5
5,000-6,999	12.2	.9	12.1	3.7	11.0	3.8	8.9	3.3	8.5	2.2
7,000-9,999	**	.2	12.3	.9	12.2	1.1	10.0	.9	**	.6
10,000 and over	**	.1	**	.4	**	.7	**	.4	**	.5
Total		100.0		100.0		100.0		100.0		100.0

*Data from (U.S. Bureau of the Census, 1963, Table 9). Median school overall for farm laborers and foremen 7.7.

**Too few observations for adequate estimate.

p. 110). The discrepancy between incomes of farm and nonfarm males of the same age and education generally was greatest for the highest education and age brackets.

Fourth, judging by factory worker wage standards of approximately $5,000, on the average a 35-44 year old farmer needed to be a high school graduate to earn a "parity" income based on Table 15. In age brackets below 45, incomes over $5,000 were associated with at least a median education over 12 years. Fifth, both educational levels and income levels were low for the farm laborers (Table 16). Ironically, a given income range appeared to require less education for hired workers than for farm operators. This conclusion in all likelihood does not hold for the higher income brackets.

The above data on gross returns do not indicate whether education is a profitable investment for rural people living in depressed areas. Rates of return on education, shown in Table 17, indicate that under certain circumstances general education for people who remain in rural areas has a high economic payoff. Estimates computed by Hansen and Hanock show that education is profitable on the average for U.S. males. Rates of return on education for rural males who migrate with adequate quality of education also indicate that general education, at least through high school, is economically profitable for society even though persons remain in the depressed area. Rates of return fall off sharply above a high school education and indicate that an "average" college graduate from a low income area would not profitably return to work in his home community.

The impact of education on the persistence of poverty and on employment is inherent in the estimated rates of return in Table 17, but are more clearly brought into perspective in Tables 18, 19, and 20.

Not only are the chances of being in poverty higher for persons with less education, but the chance of remaining in that category are also much higher (Table 18). Chances were only two out of five that a family with a head with 16 or more years of education, in poverty in 1962, would be in that category in 1963. Chances were four out of five that a family with a head possessing eight years or less of education, in poverty in 1962, would be poverty in 1963.

One can infer from Table 19 that the level of education is inversely related to the level of unemployment. The unemployment rate was 5.6 times as high among nonfarm laborers as among professional and technical workers in 1966. Partially because of inadequate education, the unemployment rate among nonwhite teenagers was 21.2 per cent despite the relatively full employment economy.

Underemployment is a better measure than unemployment of manpower nonutilization in farming, and is high for persons with little education (Table 20). The rate of underemployment among farm males with one to four years of elementary school is approximately double the rate of those with four years of high school. Raising the level of schooling will reduce the amount of underemployment in farming, as people find better opportunities to use their labor outside of the sector.

Table 17. Private and Social Rates of Return to Education for White Males by Place of Residence, 1960*

Years of schooling	Private rates of return						Social rates of return				
				Rural					Rural		
	Whites North**	Whites South**	Urban	Nonfarm	Farm	Total	United*** States	Urban	Nonfarm	Farm	Total
	(Per cent)			(Per cent)					(Per cent)		
16 years over 12 years	9.6	10.1	12.8	11.8	16.0	12.8	10.2	9.4	8.5	10.2	8.9
16 years over 8 years	11.5	12.8	13.4	16.5	15.9	16.6	10.5	10.0	11.7	11.3	11.7
16 years over 0-4 years	17.0	21.6	23.7	34.8	26.1	28.9	12.1	13.1	16.2	13.9	15.5
12 years over 8 years	16.1	18.6	14.3	26.6	15.1	23.3	11.4	11.0	19.5	11.9	17.5
12 years over 0-4	33.1	44.1	39.0	67.3	34.7	43.9	13.6	15.8	23.0	16.8	20.8
8 years over 0-4	100.0	100.0	155.9	179.3	87.9	76.6	15.0	20.1	24.8	20.7	22.7

*Unless otherwise indicated data are preliminary estimates (Redfern, 1968). The basic data source was the one-in-one-thousand sample of the 1960 census of population which provided more classifications than are available in published census data. The basis unit being examined is a white male who is not in school or in the armed forces. Private rates of return match earnings differences against the earnings foregone by continuing on in school. Social rates of return compare earnings differences with foregone earnings together with the cost of providing the education incurred by society. This consists of current expenditures plus a charge for capital on a per student basis.

**Private rates of return from (Hanoch, 1965). He used a procedure very similar to that used by Redfern to calculate the private rates of return. The same 1960 census data were used. However Hanoch's data are adjusted for more variables, such as occupation and industry.

***Social rates of return were calculated by Hansen using 1950 census data (Hansen, 1963). They were calculated using similar assumptions to the social rates calculated by Redfern for rural and urban places of residence. Costs are foregone earnings plus the costs of providing instruction, administration, facilities, etc.

Table 18. Persistence of Families in Poverty by Education Level of Family Head.*

Years of Education	Percentage of families classified in poverty in 1962 who remained in the same category in 1963
Less than 8 years	79
8 years	72
9-11 years	64
12 years	53
13-15 years	54
16 years or more	40

*Data from (Economic Report, 1965, p. 164).

Table 19. Unemployment Rates, by Major Occupation Groups, Age, Sex, and Color, 1966*

	1966 unemployment**
	(Per cent)
Total	3.9
White-collar workers:	
Professional and technical workers	1.3
Managers, officials, and proprietors, except farm	1.0
Clerical workers	2.8
Sales workers	2.7
Blue-collar workers:	
Craftsmen and foreman	2.8
Operatives	4.3
Nonfarm laborers	7.3
Service workers:	
Private household workers	3.6
Other service workers	4.8
Farm workers:	
Farmers and farm managers	.4
Farm laborers and foreman	4.1
Teenagers (14-19 years of age):	
Males	11.2
White	9.9
Nonwhite	21.2
Females	13.0
White	11.0
Nonwhite	31.1
Adults 20-44 years of age:	
Males	2.6
White	2.3
Nonwhite	5.3
Females	4.6
White	4.0
Nonwhite	7.8
Adults 45 years of age and over:	
Males	2.3
White	2.1
Nonwhite	4.2
Females	2.7
White	2.5
Nonwhite	4.4

*Data from (Economic Report, 1967, p. 102).

**Number of unemployed in each group as per cent of labor force in that group; data relate to persons 14 years of age and over.

Table 20. Economic Underemployment of Rural Males, by Education, 1966*

Years of school completed	Average annual unemployment equivalents**			
	Percentage of the civilian labor force		Number	
	Rural nonfarm	Rural farm	Rural nonfarm	Rural farm
	(Per cent)	(Per cent)	(1000)	(1000)
Total	8.4	26.1***	708.2	817.7
None	26.8	35.1	28.2	20.1
Elementary:				
1-4 years	18.3	36.8	101.4	99.6
5-7	10.7	31.2	139.1	171.0
8	8.5	28.5	126.6	221.9
High School:				
1-3	8.2	23.8	140.9	119.2
4	5.4	19.6	112.5	144.3
College:				
1-3	4.5	17.2	26.4	27.1
4	6.1	23.2	20.2	13.2
5 or more	4.7	4.6	12.8	1.3

*For source of data see (Bachmura, 1967, p. 163).

**Average annual man-equivalents that would be surplus in present usage if the rural male labor force 20-64 years of age were utilized as effectively (as indicated by level of earnings attributable to labor services) as comparable manpower in the national labor force.

***These data indicate a lower percentage of excess labor in agriculture than other methods because here the total resource adjustments that would accompany a movement to equilibrium are not taken into account. "Percentage unemployment" is the number unemployed divided by the total number of rural males in the respective group.

Table 21. Percentage of the U. S. Population Voting for President in 1952 and 1956*

Age and sex	Education completed					
	Non-South			South		
	Grade school	High school	College	Grade school	High school	College
	(Percentage in category voting)					
Less than 34						
Male	60	78	88	19	55	81
Female	44	73	90	13	41	74
34-54						
Male	80	87	96	55	80	88
Female	71	85	91	22	56	82
55 and over						
Male	87	93	100	63	71	82
Female	71	91	93	31	58	86

*For source of data see (Weisbrod, 1963, p. 127).

Table 21, indicating that the incidence of voting increases with education, appears to digress from the main theme of this section. It is included because voting behavior influences public programs which in turn influence earnings. Poor people often display voting behavior inimical to their apparent best interests. Many of the poor have little education, and data in Table 21 show that low education means a low incidence of voting. Taking some extreme examples from the table, Southern females over 34 years of age with a college education had three to four times the incidence of voting in the indicated elections as their counterparts with only a grade school education.[2] In an election decided by popular vote, 1,000 ladies with a college education packed about four times the political muscle of 1,000 ladies with only a grade school education in the South.

A second voting characteristic of the poor is their tendency to display loyalty. Some poor counties in eastern Kentucky for example, consistently vote Republican, others consistently vote Democratic in national elections. Such voter loyalty leads, not to political favors, but to being ignored by national legislators and Presidents who must concentrate on winning over the swing voter.

If a group wished to be bypassed by special development programs sustained by power politics, it would be difficult to think of characteristics more consistent with that goal than failure to vote, blind party loyalty and failure to join organizations. Additional education will help to change these patterns. Political support for publically financed area development programs will follow.

---

[2] Racial discrimination also figures in the percentages.

Education and occupational mobility

In short, research results support the conclusion that education is a profitable investment for society. Education has a high economic payoff in most areas and occupations. With low levels of schooling, earnings of many unskilled laborers are as great on the farms as in other occupations. Also, earnings may be higher for persons with little education as farm laborers than as farm operators, because of the schooling that on the average seems to be required for successful decision making. Additional schooling and monetary gains from occupational mobility are mutually reinforcing. In an increasing number of jobs and occupations, institutional barriers prohibit entry without meeting minimum educational requirements of a Bachelor, Ph. D., medical or law degree. Education can be profitable to individuals in rural poverty areas who are mobile among geographic and occupational opportunities.

Also education may not be very profitable to the local community if the local resource base offers few favorable job opportunities or if individuals leave who have absorbed the local investment in education. Considering risks involved and the shortage of individual capital and a small tax base, it should not be surprising that many local communities have little enthusiasm for a greatly expanded program of education. Individuals who profit more from education are likely to be those who leave the local community. The fact that some of the capital invested in education at considerable sacrifice is lost, and the fact that communities are understandably unwilling to see individuals leave the community, help to explain reluctance to invest adequately in education in poverty areas.

It is an accepted fact that migration is necessary to eliminate rural farm poverty. Migration may be to near or distant nonfarm employment but it must occur. Of the 100 farm youths reaching an age for productive employment, about 50 are needed to replace "normal" exit of established farmers and leave a stable population. But the number of farmers must decline to raise income levels, hence in most rural poverty areas at least 85 per cent of rural youth reaching a productive age must find off-farm work to make satisfactory progress toward solution of the poverty problems. There will not be sufficient off-farm work in the locality--many rural youth will have to migrate.

Statistics show a heavy reverse flow of migrants back to disadvantaged areas. This reverse flow undoubtedly is prompted in no small part by inadequate education and by attitudes inconsistent with smooth integration into urban society. The results of a number of local migration studies are summarized in a 1967 study (Tweeten, 1967). The results are conflicting, some studies showing that migration is highest among the least educated. While local studies show conflicting results about who migrates, census data indicate that on the average over the U.S., migration rates support both the push and pull theories of migration.

U.S. Census data for 1960 in Table 22 permit us to re-examine the push-pull theories of migration. One contention is that the aphorism "last hired and first fired" applies to the least educated among regions as well as over time. Those with least education are most influenced by depressed economic conditions within a region, and these individuals are pushed by declining job opportunities from depressed regions to more prosperous regions. Using the farm example, it is the full renter, sharecropper and hired farm laborer who is least educated and has the least economic "bargaining power," hence he is most likely to be pushed to employment elsewhere. Support for the push theory would be apparent in high migration rates among regions for the least educated.

Another contention is that the most educated are best fitted by skills and attitudes for successful employment and assimilation into more prosperous regions. These individuals would be pulled from a slow growing region to more lucrative jobs elsewhere. This theory would be supported by high migration among regions of the most educated.

Data in Table 22 clearly show that mobility is greater among young than old adults. For persons with four years of high school in 1960, 15.3 per cent of these 25-29 years of age lived outside of the region of their 1955 residence. But only 6.0 per cent of those 50-54 years of age lived outside their 1955 region of residence in 1960.

The data in Table 22 support the pull theory. Within a given age bracket, migration rates tend to be high among those with most education. The highest migration rates of all are found among individuals who are both young and highly educated. This suggests that the potential is likely to be large for redistributing benefits to other regions and away from the region where investment in schooling occurred.

Vocational education

A study of costs and benefits of a general high school education, high school vocational education, and post-high school vocational education in Worchester, Massachusetts, gave a largely pessimistic outlook for vocational training (Corazzini, 1966). The public per pupil costs of vocational education for males, whether at the high school or post-high school level, were 2.3 times those of a regular high school education. The size of the premium paid the vocational high school graduate relative to the regular high school graduate varied inversely with the size of the hiring firm. In the smaller firms the starting wage differentials were sufficient to equate

Table 22. Percentage of United States Population 25-64 Years of Age Living Outside Region of 1955 Residence in 1960 by Age and Education Attainment*

	Educational Attainment							
	Elementary			High School		College		
Age	1-4	5-7	8	1-3	4	1-3	4 or more	Total
25-29 years	5.8	8.1	9.9	10.6	12.4	19.1	27.6	13.8
30-34 years	4.7	5.9	6.7	7.1	7.9	11.9	18.2	8.8
35-39 years	3.8	4.4	4.9	5.4	6.6	10.1	13.5	6.9
40-44 years	3.0	3.3	3.6	4.1	5.2	8.1	10.4	5.1
45-49 years	2.5	2.6	2.9	3.4	4.2	5.8	7.5	3.8
50-54 years	2.2	2.3	2.6	3.0	3.7	4.6	5.9	3.2
55-59 years	2.0	2.1	2.5	3.1	3.6	4.1	5.0	2.9
60-64 years	1.8	2.9	2.7	3.3	4.0	4.2	4.9	3.1
Total	2.8	3.5	3.8	5.3	6.8	9.6	13.7	6.2

*Data from U.S. Census. See (Hines and Tweeten, 1968).

present values of the two types of education for the graduate within 6-12 years. In the largest firms the starting wage differentials were not sufficient to equate the present value of extra costs and benefits at any rates of discount employed (Corazzini, 1966, p. 112). Data were only available on initial salary, but the author argued that the starting pay differentials would decrease over time, and perhaps would disappear within five years. If so, vocational education benefits would not cover costs.

Starting salaries for graduates of post-high school vocational-technical programs were, on the average, slightly higher than those of their vocational high school counterparts. But these wage differentials were not large enough to justify investing in post-high school vocational education (Corazzini, 1966, p. 115).

Any reasonable estimate of the contribution of vocational schools to reduction in dropout rates and to increased mobility of workers also could not justify the cost of the vocational school in Worchester. The author concluded that cash payments to employers who would then provide on-the-job training for workers would be a more efficient use of public funds for vocational education.

A North Carolina study contains estimates of the rate of return on two years of post-high school technical education in the state (Carroll and Ihnen, 1966). The sample was 45 high school graduates who did attend the technical school and 45 "paired" high school graduates who did not attend the technical school. The estimated social rate of return on investment in technical education was 16.5 per cent if per capita real earnings would increase over time at the rate of two per cent per year. The social rate of return was reduced to 11.7 per cent when zero growth in the initial income advantage of the technical school graduates was assumed.

The total cost per trainee at the Camp Kilmer Job Corps Center ranged from $6,412 to $18,750 (Cain and Somers, 1967, p. 43). To earn a five per cent return on total investment, post-trainees would need to receive salaries from $7-20 per week above salaries of persons with similar backgrounds but without the training. A separate 1964-65 study of post-MDTA trainees revealed that Negroes on the average were earning $13 per week more than they earned on their pre-training jobs (Cain and Somers, 1967, p. 29). Whites, however, were earning only $4 more per week after training. While the above data on the Job Corps and the MDTA trainees are not comparable and one cannot make statements about absolute profitability, it is interesting to note that the investment in training of Negroes in this instance was relatively more profitable than investment in whites. It should be kept in mind that these were retraining programs, often dealing with hard-core unemployables who might be expected to have a low return on retraining investments.

An interview study of 1,379 workers in West Virginia in 1962 and a follow-up study in 1964 provided the basis for estimating rates of return on retraining courses sponsored by the Area Redevelopment Act and the Area Vocational Training Program (Cain and Stormsdorfer, 1967). The former was a Federal program; the latter a program of the government of West Virginia. The social rate of return on investment in retraining was estimated to be approximately 430 per cent for males and 140 per cent for females. Non-trainees, selected from the unemployed files at the local employment office, were the control group. Judging from data on education and work experience, it is doubtful that the control group adequately represented the earning of the retrained group had they not been retrained. Consequently, the rates of return are likely to have an upward bias.

Cain used two approaches to estimate the benefit-cost ratios from social investment in the Job Corps: One was based on improvements in educational attainment coupled with Hanoch's estimates of the relationship between education and income; the other was based on a 1967 survey of ex-corpsmen and persons who applied for the Corps but did not participate (Cain, 1967). Whether the no-show group is a realistic control group is questionable. Based on education gains, benefit-

control group is questionable. Based on education gains, benefit-

cost ratios ranged from .58 to 1.31 with a discount factor of three per cent. Based on wage gains and a control group of now-shows, the benefit-cost ratio was 1.04 with a discount factor of five per cent, and was 1.45 social rate of return on investment in the Job Corps was approximately five per cent.

The uncertainties of the data were so great that even the "best" estimate is none too reliable. Nonetheless, it is gratifying to note that a program, basically contrived as a welfare measure to deal with hard-core poverty, may have some apparent positive net economic payoff.

Some summary comments on education

I gave efforts to improve the amount and quality of primary and general secondary education precedence over public investment in vocational education as a priority measure to alleviate poverty. There were two reasons for this: First, a good general education is the foundation for a successful vocational program, and second, reports conflict on the economic value of vocational education. It is nonetheless true that vocational education can often be a highly productive and rewarding activity, as some of the above case studies illustrate.

A continuing economic appraisal of vocational education is needed. Issues are the optimum mix of youth versus adult education, coordination of training with available jobs, use of public facilities versus paying industry to train workers, and the feasibility for portable vocational schools to bring training to the job demand (such as training workers for employment in a new factory).

From an efficiency and equity standpoint, a case can be made for improving the quality and amount of education in economically retarded rural areas. This incremental support may largely come from the Federal government, and care must be taken to avoid a regressive distribution of funds. Data for 1966-67 reveal that 48 per cent of funds for elementary and secondary education comes from local sources.[3] Since a high per cent of local graduates migrate from the area, the benefits of education tend to go with the migrants outside the community or state, while the costs are concentrated in the community. Without a redistribution of funds from the wealthy areas to poor areas of the nation, and from rich parts of individual states to the poor parts, the U.S. will continue to have a dangerous and unconscionable underinvestment in the education of people in rural poverty areas.

There are now approximately 30 Federal programs which can give vocational training to the disadvantaged. To improve administration and knowledge of available programs, the Federal government should consolidate some of its efforts. This does not mean that concentration should be only on elementary and secondary schools. Programs must be diverse enough to reach the preschool child and adult, as well as youth.

INDUSTRY

Local industrialization is the most widely sought route to end rural poverty. Industrialization is appealing because it avoids confrontation with the distasteful prospect of outmigration, declining population, and area decay. Numerous areas and groups pursue aggressively the elusive industrialization which collectively they cannot achieve since there is not nearly enough industry to go around using current incentives. The most serious criticism of efforts to industrialize is that it diverts attention from the more basic priority of preparing young people for jobs and mobility.

---

[3] Estimated expenditures total $32 billion for primary and secondary education in the school year 1966-67. The relative percentage shares, by sources of funds were: Federal 7.2, state 33.4, local 47.8 and all other 11.6

A case study

Based on data obtained in 1961 and 1962, an Oklahoma study estimated tangible costs and benefits of successful community-sponsored efforts to attract industry (Saltzmann, 1964). Costs averaged $100,603 per community to attract industries with loans, facilities and other concessions. Benefits from industries brought-in averaged $2,695,649 per community in the form of added payrolls, addition to real estate values, etc. The benefit-cost ratio for the communities averaged 26.8. Other research has also revealed high returns on subsidies to attract industry to communities (cf. Rinehart, 1963).

The Oklahoma communities, ranging in population from 1,500 to 13,000 on the average received a sizeable payoff relative to the costs which they incurred. In the two communities where costs exceeded benefits, each industrial development corporation that attracted the industry was a non-profit local organization. Two-thirds of the industrial development corporations in the 18 communities were of the non-profit type. The overall record of achievement appeared to be no better for the profit-making industrial development corporations than for the non-profit corporations.

Shortcomings of local benefit-cost ratios such as given above include: The studies from which the ratios are estimated do not include communities that have unsuccessfully wooed industry, and only a few of the total social costs and benefits are included. For example, the study fails to measure the opportunity cost of not locating the industry elsewhere and the social cost of an industry that pays wages below what residents would have earned if they had gone elsewhere for employment in the absence of the new local industry. The full cost of additional construction and operation of city utilities, schools, churches, etc. was not included. The informative study of Clayton, Missouri showed how introduction of labor intensive industries such as textile and apparel are likely to add more to tax roles (because of the influx of school age children) than they contribute (Hirsh, et. al., 1964, p. 408).

Many locating industries in the Oklahoma study paid $1.35 or less per hour for labor. At (say) 2,000 hours of employment per year, this rate would mean a $2,700 annual income--not enough to raise a family with one breadwinner above the poverty line. Such industry may only perpetuate poverty; although a case is made later for low-wage industries in some instances.

The high benefit-cost ratios and attractiveness of avoiding outmigration through industrialization could be expected to spawn numerous local development organizations. There were 14,000 such organizations in 1957, 68 per cent of them financed by private rather than public funds. Expenditures on promotion to attract industry nearly doubled from 1950 to 1957. More recent data would show a very large increase in the number of local development organizations and expenditures since 1957.

Unfortunately, many local development groups are unsuccessful and there are comparatively few high wage industries attracted to depressed areas, which may have little more than "friendly people" to offer the prospective firm. There are just not enough footloose industries to go around. For industry to become the powerful tool that it can be to raise incomes in depressed areas, the system of government program priorities and incentives for industry to locate must be revised.

Decentralization

The classical position is that industry should be attracted to poverty areas where high ratios of labor to capital would make costs of labor low and returns on capital high. This presupposes that labor and capital are substitutes. But the fact is that in many of the dynamic, growing, high-wage industries, skilled labor is an essential complementary input with capital in the form of plant and equipment. The return on capital operated with low-wage unskilled labor is high only if the unskilled labor is accompanied by skilled labor. And because depressed communities often possess little skilled labor, they are unable to entice firms to invest capital in plants and equipment.

Decentralization is indeed occuring. Between 1956 and 1966, the U.S. manufacturing employment increased 1,840,000 (11 per cent). Meanwhile, in the seven highly industrialized Northern states, manufacturing employment grew 37,000 (less than one-half of per cent). During the same period, manufacturing employment grew 465,000 (26 per cent) in the West and 1,026,000 (33 per cent) in the South (Economic Report, 1968, p. 134). From 1962 to 1966, private nonfarm employment grew five per cent annually in nonmetropolitan counties, and four per cent annually in metropolitan counties. The problem is to gain benefits of decentralization for depressed rural areas. Large contiguous blocks of counties with declining population are found in Appalachia, the northern portions of the Lake States, the Great Plains and the Southwest.

That economies of size attract industry is supported by the fact that employment in large metropolitan areas is growing at a rapid rate. But there are major disadvantages of large cities which are social costs, not reflected in accounts of private firms. Crime, air pollution and transportation congestion are only partly reflected in the private balance sheets that guide business location decisions. Of course, there are cultural advantages in the major population centers, but these mass benefits are perhaps overrated--they appeal especially to the comparatively few persons in top management.[4] In some industries there is need to locate near other firms in the same business to keep abreast of industry trends and share in the local labor market for specialized industry skills. These economies external to the firm may rightly lead to location of head offices for (say) garment makers in New York City. But plants to do much of the "routine" production can be located elsewhere. Experience in Oklahoma and other states indicates that new plants in depressed areas frequently experience higher absenteeism and turnover than plants in larger cities. These initial problems are soon overcome, however, and the workers mature into a stable and productive labor force.

---

[4] These people are also instrumental in making location decisions. But these people after relocation are often pleasantly surprised to find advantages of living in less congested areas that more than compensate for the museum, symphony and opera. Somewhat tongue-in-cheek, one can blame the problem on unwarranted commitment to the urban ways of life, and call for a new "reverse homesteads in reverse" to counter T. W. Schultz's "homesteads in reverse" to reduce urban congestion.

Redirecting industry location

Industrialization of rural areas can be much more successful than in the past, and more rather than less effort should be made to attract industry to depressed rural areas. The focus should be along the lines suggested below.

The concept of a viable economic area is especially important. A substantial number of firms will find sufficient factor and market economies in cities of 25,000 or more to locate efficient and profitable operations. For a development area to be viable, it is important that it be set up to include either sufficient resources or markets to make it economically attractive to firms that potentially might locate. It has been shown that the majority of depressed rural areas are located within 50 miles of cities of 25,000 or more. These growth nodes should be the focus of efforts first to improve social overhead and then to attract industry. The surrounding trade area of small towns and farms which must decline will have higher morale if they visualize themselves as part of a viable economic area with at least one expanding growth node (cf. Tweeten, 1967).

The government should give financial support only to economic development corporations associated with designated depressed but viable economic areas. An area should be of size and potential to afford, with some government assistance, professional advice; and would have a reasonable probability of successfully attracting industry.

The Federal government needs to change its policies toward industry. In addition to providing more support for education, it is necessary to enlarge subsidies to industry and withdraw from its policy of emphasizing loans to industries which cannot get credit from commercial sources. This latter policy leads to attraction of marginal, inexperienced and unstable industries to developing areas because they are most likely to have difficulties getting commercial credit (cf. Yoho and Schmid, 1965).

A sizeable subsidy program is likely to be seriously contested by large city political representatives who argue that decentralization of industry to more rural regions "robs Peter to pay Paul." Larger public monetary inducements to entice dynamic growth industries to locate in viable but depressed rural areas can be justified to the nonrural electorate as part of a national program to reduce the growth of slums, air pollution, and crime and transport problems in congested urban areas. By keeping rural migrants at home, such a policy shortens welfare and unemployment roles in the large cities. The case for decentralization of industry also has favorable national defense and survival arguments.

A very large number of industries could reduce costs by locating plants in depressed rural areas. They have not done so because of inertia of past decisions, lack of knowledge, and attachment of management to the large city way of life. A subsidy that would lead to location and lower costs for these industries in viable rural areas could be a social gain rather than a social cost. Furthermore, it may be argued that the current efforts of poor communities to attract industry with tax concessions and low cost loans and facilities is unfair. It is regressive--the areas that pay these subsidies can afford them least. In the name of equity, a case can be made for the Federal government assuming the costs of industry location now borne by the local communities.

Even a case for low wage rural industry can be made: Low wage industries use much female labor which has a low opportunity cost. Mothers have been found to be highly influential in determining aspirations and achievement of rural youth. Even at low wages, off-farm employment of mothers seems to give rise to awareness and creative tensions that lead to functional activism in children, and to their escape from poverty. For men, nonfarm employment in a low-wage local industry is often an experiment for a part-time farmer. If satisfactory, the next step is a more complete break from the farm, relocation, and a job in an industry that pays a high wage.

Principal factors considered by industry in plant location include (a) proximity to immobile factors of production including bulky raw materials and labor, (b) transportation costs and proximity to markets, and (c) economies of centralization or decentralization. The latter include external economies arising out of concentration of similar industries in an area.

Often firms find many locations which satisfy the three principal factors. Among locations that do satisfy, the final choice may be made on the basis of secondary factors including (a) availability and cost of buildings and sites, (b) tax laws, (c) local infrastructure including schools, churches, recreation and cultural attractions, (d) living conditions including housing, climate, air pollution, and population densities; and (e) other state and local incentives.

The three principal factors materially influence production costs and profits, and a community has limited control over them. While a final answer awaits definitive research, there appears to be little doubt that a large number of industries are not bound to large urban-industrial areas; these industries can profitably locate in less densely populated rural areas. Labor will have to be trained for expanded industry -- it might as well be trained in depressed areas, possibly by "mobile" public vocational schools. The problem is getting industry in the face of inadequate secondary factors, many of which require increased employment itself to expand taxes required to finance social overhead.

Federal inducements to attract industry

Low interest loans, tax concessions and direct grants have been used to attract industry to slow growing areas. The method discussed in some length earlier and used most frequently is loans. Loans are a rather weak inducement, however, and more powerful medicines -- Federal grants and tax concessions -- warrant consideration.

One promising approach to attract industry to depressed rural areas is the investment tax credit. The magnitude of the tax credit would be a function of area unemployment rate (including, of course, farm underemployment). One suggestion is that the tax credit rate be double the unemployment rate; with no tax credit unless unemployment were over seven per cent. Thus 50 per cent of new industry investment could be deducted from Federal income tax if unemployment were 25 per cent or more. The tax credit would be 20 per cent of investment if the unemployment rate were 10 per cent. There are many advantages to this program. First it would be a powerful economic inducement to bring established, successful industries into depressed areas. It would pit the profit motive against other factors that have inhibited decentralization. The investment tax credit appears to be a cost-effective approach to at once attack the twin problems of too many people in the metropolis and too few jobs in depressed rural areas. To the extent that the investment credit encouraged industry to do only what it would profitably do in a more nearly perfect market, the incentives could be regarded as a productive investment rather than a subsidy or social cost.

Second the program would free persons from EDA and other government agencies to concentrate on feasibility studies of plant location and on encouraging outmigration from areas where development is not feasible. The tax credit could be administered by existing government revenue agencies. The area and regional approach would continue to be the focus of development activity. It is expected that most industry attracted by the program would choose to locate in the development node cities of 25,000 or more population. There appear to be economies of city size up to 25,000, but diseconomies due to congestion in large central cities. Development might best be concentrated in cities between these extremes.

Third, the credit is a self-regulating device. Successful efforts to attract industry would reduce unemployment and eliminate the tax credit.

Fourth, the burden of area economic development would be shifted to the Federal government and away from depressed areas which can ill afford such efforts. To do so, the exemptions of municipal bonds from Federal income tax and of industry property from local taxes should be discontinued. Hopefully the above changes would constrain over-zealous local politicians from paying subsidies to industry that exceed benefits derived.

Some crude estimates of the economic effectiveness of Economic Development Administration outlays can be made. In 1966 and 1967, EDA loans to businesses totaled to $94 million. This amount directly combined with an estimated $81 million of private investment led to direct investment of $175 million. Based on an investment of $20,000 per worker, the investment created 8750 jobs. An employment multiplier of 2.0 would place the primary and secondary job creation at 17,500 jobs. The result suggests that each job required $5371 of government outlay. This estimate gives an upper limit to the cost-effectiveness. The lower limit can be estimated by considering that loans to business of $51 million in 1967 comprised only 19 per cent of the EDA budget. Other expenditures for public facilities, planning and other purposes may have been less cost effective but contributed to the above employment. If the entire EDA outlay is spread over 17,800 permanent jobs, the cost per job rises to $26,857.

It has been estimated that the seven per cent investment tax credit granted U.S. industry in recent years increased investment one dollar for each two dollar loss in tax revenue (cf. Larson, 1968). If a $20,000 investment is required per worker, and each new job in industry created one additional job through the multiplier effect, then each new job would "cost" the Federal government $6667. Thus the investment tax credit seems to be a more cost-effective approach than past EDA programs.

Grants (cash subsidies) to attract industry have had little use in the U.S., but have some obvious advantages. They can be specifically focused, their value can be known accurately in advance and hence provide a solid planning target for firms, and grants can be a major benefit to firms in the difficult gestation period before production begins to generate receipts. By making grants proportional to investment, capital intensive firms are favored. Or by making grants proportional to the number of employees, labor intensive firms are favored.

There are also obvious shortcomings in grants. They require treasury expenses, which legislators facing a tight budget are reluctant to appropriate. They also invite abuse--a firm may receive payment, then fail to develop fully the planned facility. Finally, as with low interest loans, there is a bias toward attracting capital-short, financially-pressed companies rather than companies with established access to commercial credit.

The Canadian experience is instructive. Their country has shifted from tax concessions to grants, the latter allegedly a more powerful inducement to attract industry to slow growing regions (Parks, 1966). In 1961, Canada introduced double-depreciation, permitting a faster tax write-off of assets for firms manufacturing a product new to Canada or new to a labor surplus area. A new tax incentive was introduced in 1963, permitting new and existing manufacturing firms (provided they were at least 25 per cent Canadian owned) to deduct depreciation for tax purposes at the rate of 50 per cent per annum on a straight line basis. If the firm located in a designated area of surplus manpower, they could claim exemption from income taxes for three years, write off the cost of machinery and equipment in their fourth and fifth years at the rate of 50 per cent per annum, and write off new buildings at the rate of 20 per cent per annum.

In 1966 a system of grants was introduced in Canada to encourage industrial development in designated areas of slow growth. Grants were made available to manufacturing and processing firms equal to one-third of the first $250,000 of capital investment, one-quarter of the next $750,000 and one-fifth of investment over $1 million -- with a limit of $5 million per grant. The grants were not deductable from the capital against which allowances were claimed for tax purposes.

Clearly, more investigation of Canadian and U.S. experience is needed to determine what approaches work best. A preliminary conclusion is that either a tax or grant system will work if monetary incentives are sufficient.

Farm-nonfarm interaction

Studies reported earlier clearly showed that industrialization at best has mixed effects on farm income. Research results indicate that industrialization often reduces income from the farm itself because farmers spend more of their effort at nonfarm work and less on farming. The increase in prices received by farmers for commodities due to proximity to a growing market does not compensate for lower farm output. But total earnings from farm and nonfarm sources tend to go up in the vicinity of an area that experiences an increase in nonfarm jobs.

After studying the development potential of the Memphis, Tennessee economic area, Bachmura concluded that it was doubtful whether nonagricultural employment could be found for its emerging surplus farm population (Bachmura, 1959). Yet the Memphis area, with a sizeable initial urban-industrial base, good location and a subsidy program that had operated 20 years to support local industrialization (in the Mississippi section of the area), can be viewed as one of the more favorable growth areas in the South. If this area cannot absorb its farm migrants, there are likely to be few areas which can. In conclusion, local industrialization will be an alternative to mobility in only a few of the low income rural areas in the next two decades unless area development programs are drastically revised (cf. Ruttan, 1958, p. 194).

Income and employment multipliers

The economic repercussions on the farm and nonfarm economy following the introduction of new industry can be judged from income and employment multipliers. Multipliers show the impact of a change in a given economic sector on the entire economy. These multipliers for Oklahoma tend to be high for agricultural processing and for manufacturing (Table 23). These sectors have high linkages -- they require a considerable amount of inputs, and their output entails considerable marketing costs before reaching consumers. Each $1.00 increase in farm income from livestock and livestock products in Oklahoma results in a $2.81 increase in income in the state and an additional $.21 increase in income outside the state, giving a total multiplier of $3.02. Each $1.00 increment in crop income results in only a $1.40 increase in state income. Of the $1.40, $1.00 goes to crop producers and $.40 goes to others who provide marketing and other services to crop producers.

On the average, state employment is increased by two workers when one worker is added to an economic sector. An Oklahoma study has estimated that an increase in farm employment by 100 workers leads on the average to 82 workers added to other sectors, hence the farm employment multiplier is 1.82 (Olson and Walker, 1966).

The multipliers in Table 23 indicate that location of an average manufacturing plant in Oklahoma employing 100 workers and paying $5,000 per worker per year would be expected to increase state employment by 293 workers and population by 3.19 (293) = 935 persons. The plant output (here assumed to equal the payroll) of $500,000 per annum would result in a total income increment of 3.35 ($500,000) = $1,675,000 in the state. These multipliers are averages--actual multipliers vary by plant and location. They also do not tell us much about the impact on agriculture of an increase in industrial activity.

Table 23. Income and Employment Multipliers, Oklahoma*

Sector	Income		Employment	
	State only	Total	State only	Total
Livestock and livestock products	2.81	3.02	1.82**	n.a.
Crops	1.40	1.52	1.82**	n.a.
Agricultural processing	4.32	4.92	2.82	3.35
Manufacturing	3.35	4.01	2.93	3.52
Transportation, communication, and public utilities	1.44	1.56	1.45	1.62
Finance, real estate and insurance	1.46	1.61	1.55	1.71
Services	1.58	1.80	1.33	1.44
Wholesale and retail	1.28	1.37	1.32	1.40
Mining	1.57	1.72	2.56	2.94
Economy multipliers	2.13	2.39	2.00	2.28

*Data from (Little and Doeksen, 1968).

**Employment multipliers not available from above study. The multiplier 1.82 is taken from an estimate for Southwestern Oklahoma (Olson and Walker, 1966).

The interdependence coefficients from an input-output study for Oklahoma show that each $1 increase in final output of manufacturing on the average requires .3 cent increase in output of livestock and livestock products, a 1.0 cent increase in output of crops, a 16 cent increase in output of wholesale and retail services, and a 36 cent increase in output of mining (Little and Doeksen, 1967). An increase in the output of non-agricultural industries requires little increase in farm output. The provision of employment for farm workers is a more important factor, however. While farm workers possess fewer skills for industry than nonfarm workers and tend to be at a disadvantage when competing for nonfarm jobs, the location of new nonfarm jobs in rural areas does help farmers. Sometimes the effects are very indirect--farmers take over the unskilled jobs vacated by nonfarmers who moved to positions in the new firm or factory.

GUARANTEED EMPLOYMENT

Guaranteed employment by the Federal government is ranked below subsidies to industry in cost-effectiveness to reduce poverty. This contention (as well as other rankings herein) depends partially on the time period and group being considered. For able bodied workers with productivity below the minimum wage, public employment may be more cost-effective than tax concessions to locating firms as a means to raise income in the short run.

Both the National Advisory Commission on Food and Fiber and the National Advisory Commission on Rural Poverty placed their prestigious support behind Federal programs to guarantee employment. The latter commission recommended "That the United States Government stand ready to provide jobs at the national minimum wage, or better, to every unemployed person willing and able to work" (NACRP, 1967, p. 19).

According to one survey, most Americans favor establishing large-scale Federal projects to give jobs to all unemployed: 66 per cent of the whites and 91 per cent of the Negroes interviewed in 1967 thought it a good idea (NACRP, 1967). But is it? The efficacy of public employment depends on (a) the value of work which will be performed, (b) the extent to which workers will be attracted from private industry, and (c) the number of poor who can benefit from public employment.

Employment of the poor would be largely restricted to unskilled occupations. Frequently suggested activities include: repair of dilapidated housing, improve water and sewerage systems, assist personnel in schools and hospitals, and maintain and beautify parks and highways. Many of these jobs could be performed in home communities. But there are drawbacks. If the wage rate were equal to or exceeded the minimum wage, as recommended by the Poverty Commission, many workers would be bid away from more productive private employment, thereby reducing economic efficiency. Another problem is that a comparatively few welfare recipients can benefit from guaranteed public employment. Many persons on welfare are too old, too young, are disabled, or must take care of children at home. These groups are the serious hard-core poverty problems. Hence the guaranteed employment would benefit those poor who often need help least. Nevertheless guaranteed employment has higher cost-effectiveness than welfare grants for some categories of the poor, and can improve much neglected social overhead. The wage for such employment should be above the welfare grant provided by (say) a guaranteed income, and should be below the minimum wage.

The hard-core unemployed are shunned by private industry because of high costs of training, rapid turnover and absenteeism. With at least 2 million rural unemployed or underemployed, and capital investments of $20,000 per worker on the average required per productive, permanent job, the required public capital investment of $40 billion in jobs is both too great and too socialistic for the American public. Private industry is the obvious choice of partner. An alternative to guaranteed public employment, and likely a more cost-effective approach, is guaranteed private employment through public support. The government takes bids from private firms to train and employ the hard-core unemployables in their plants.

In late 1967 a new program, Job Opportunities in the Business Sector (JOBS), was initiated to increase employment to the most deprived segments of the population through cooperation between private industry and government. The plan calls for private industry to train and hire 100,000 of the disadvantaged during the next 18 months following January 1968 at a Federal cost of $350 million, or $3500 per job created. If these estimates are realistic, the JOBS approach appears to be more cost-effective than the industry location inducements discussed earlier. However the program is focused on urban areas, and may not be effective in speeding decentralization. Another new effort, the Concentrated Employment Program, is administered by the Department of Commerce and focuses local, state and Federal agencies on employment of disadvantaged workers in rural and urban poverty (Economic Report, 1968, p. 147).

RECREATION

Many parts of Ozarka and Appalachia are suitable for recreational developments. Programs of reforestation and road improvements need to accompany efforts to improve the recreational value. Improved roads not only would provide easy access of tourists but also would enhance adjustment opportunities for area residents by improving communication with outside areas. The process of reforestation would provide some jobs, and public purchase of land for recreation sites would encourage adjustment of people now underemployed on marginal farms to more productive employment. Those boxed-in by lack of skills would need financial assistance to obtain job-training. Those boxed-in by old age or disabilities would require transfer payments and could remain in the farm buildings even though the farmland is reforested.

It should be recognized that conversion of farmland to recreational uses is a very limited solution to problems posed by rural poverty. The rural nonfarm community would not necessarily benefit if the increased trade of tourists was small in comparison to the reduced trade of farmers. Also, recreation activities tend to be seasonal, and create problems of utilizing labor productively the remainder of the year.

DIRECT GRANTS

Public assistance in the form of transfer payments ordinarily do not make Federal funds go far to raise income. A proposition made earlier is that the economically least disadvantaged within any given poverty group tend to obtain the most benefits from programs of education or industrialization focused on that group. Hence, direct grants tied to individuals are sometimes the only way to get funds to the most disadvantaged. There are several forms of "direct payments" including (a) payment in services or goods, such as food donation, (b) cash grants such as welfare payments and aid to dependent children, (c) partial grants such as unemployment, retirement, disability and medical compensation, where the government and the private sector or individuals share on an actuarial basis the cost of the program, and (d) a negative income tax.

It can be shown that welfare payments in cash rather than in an equivalent dollar volume of specific goods or services places the individual on a higher indifference (satisfaction) curve. The case for payment in kind is that society knows better than the individuals what is good for him. And this is often true. Tying welfare payments to education or to performance of work makes payments go farther to raise income, but as stated earlier, may give payments only to the particular "poor" who need assistance the least. There are many poor people who lack the physical and mental capacities not only to earn a socially acceptable income but even to qualify for welfare grants by the most token performance standards. For these, there is little alternative to transfer payments. Efforts to train and create jobs for the aged and other hard-core unemployed may waste substantial administrative and teaching talent, hence direct grants are the most cost-effective means to raise their income. And the earlier discussion indicated that there are still many such people to whom welfare assistance has not yet been extended.

Extending social legislation to the farm

Substantial progress has been made to reduce the loss of dignity from welfare payments. Most notable is the case of Social Security and unemployment insurance, where the individual pays some part of the program. It is unfortunate that farm workers of all major groups on the labor force have been given the least protection under labor and social insurance legislation. They are excluded from workmen's compensation and unemployment insurance. The Labor Management Relations Act does not protect their right to organize and bargain collectively. They are excluded from the wage and hour provisions of the Fair Labor Standards Act and from most state minimum wage laws. Some additional social legislation undoubtedly should be extended to farm workers. But as stated before, farm workers tend to receive low wages because they have inadequate human and material resources to earn a better living. Raising minimum wages above their low marginal value product would place more of them on welfare rolls and require publically financed training and assistance. There already are too few training opportunities to fill present needs. Extension of minimum wages to hired farm workers must be accompanied by effective programs to prepare displaced workers for other jobs.

Guaranteed annual income

The numerous special programs designed to make government dollars go far to raise the income of the poor are often messy and difficult to administer. Many of the poor are overlooked. To reduce the administrative nuisance and costs, to reduce scandal and attendent attacks on poverty programs by administrators, and to get the poverty funds to those who need them, direct grants in the form of a guaranteed income have been suggested. Grants ideally would be some fraction of the difference between income and a socially acceptable norm, such as a $3,000 annual income per family. The fraction would be less than one to maintain incentives for work. If the fraction were say .6, then the net income of a poor family would be raised $40 by additional work that would add $100 of earnings and would reduce welfare payments by $60. Income would then always be higher for those who worked. This approach has been embraced widely by economic liberals and conservatives. The shortfall of income now is only $11 billion below the socially acceptable minimum among individuals and families over the country. Going to a guaranteed annual income or a negative income tax would entail an elimination of some but not all current poverty programs, and would require a net increase in welfare outlays of perhaps $12 billion. Though expensive, this is less than 2 per cent of the GNP.

But would it eliminate poverty? Though a good beginning, the answer is "no" if poverty is a state of body and mind as well as an economic condition as was argued previously. A guaranteed income may alleviate the symptoms rather than the causes. There are two conceivable ways to eliminate poverty: one is through education in its broadest sense to create the proper attitudes and skills that will lead to adequate income levels. The other is to begin with a transfer payment to raise income to acceptable levels; then hopefully a middle-class income will lead to "middle-class" attitudes and skills. There is no assurance that the latter approach will work, and with limited public funds it is better to concentrate on programs such as education and industrialization that make government dollars go farther to raise income levels. But as public funds become more available, it will be feasible to use a negative income tax or other transfer payment to raise income of all in society to socially acceptable levels. The guaranteed annual income is one of the few programs that can totally eliminate the overt forms of poverty. It can reduce the overhead costs and the messy administration that has plagued and jeopardized past programs. These advantages suggest that guaranteed income is the direction that poverty programs will take in the future.

REDISTRIBUTION OF FEDERAL REVENUE TO STATES

States may be less efficient than the Federal government in disbursing poverty funds. Conflicts among power groups, lack of political muscle by the poor, and racial discrimination interfere with equitable use of funds. Furthermore, poverty programs are likely to be most equitable and efficient that go through the fewest channels of government. These considerations certainly dampen enthusiasm for programs to redistribute taxes directly back to states. But the program also has substantial advantages, including a chance to promote a progressive redistribution of income and reduce the financial burden of low income areas supporting good schools. As a stopgap measure preceding instigation of a guaranteed income, the Federal government can improve the income distribution by returning Federal revenue to the states. This should be done by grants based on population and the shortfall of state per capita income below the national average. Every effort should be made to avoid returning revenue on the basis of the revenue paid by each state.

Studies of taxes in Oklahoma and other individual states reveal that the state and local taxes are regressive. This finding is consistent with data for the U.S. in Table 24. Total taxes as a proportion of income were 19.4 per cent for those in the $10,000-14,999 bracket and were 21.4 per cent for those with income under $2,000. Even the progressive Federal income tax is not sufficient to offset this regressiveness of state and local taxes in some states. The Federal income tax is only mildly progressive due to many loopholes such as capital gains, mineral depletion allowances, tax-free bonds and "charitable" contributions. Closing of these loopholes and redistribution of income back to the states could do much to raise the level of living and education standards of poor areas. Some Federal guidelines might be necessary to insure that the state programs would help those who are most economically disadvantaged.

SUMMARY AND CONCLUSIONS

The ranking in the text of poverty programs was based on the proposition that those programs should receive priority which make limited public funds go farthest to raise incomes of the poor. The specific criterion was the social benefit-cost ratio, the increment in income of the poor per dollar of public and private investment.

Tailoring cost-effectiveness to specific categories of the poor

There is a fundamental conflict between efforts to channel funds to the hard-core poor, and to increase the cost-effectiveness of poverty

Table 24. U. S. Taxes as Per Cent of Personal Income, 1958*

Income bracket	State and local			Federal			
	Property	Other	Total	Income	Other	Total	Total
	(Per cent of personal income)						
Less than $2000	7.4	6.6	14.0	2.3	5.1	7.4	21.4
$2000 - 3999	5.5	5.5	11.0	5.3	3.9	9.2	20.2
$4000 5999	4.9	5.0	9.9	7.0	3.6	10.6	20.5
$6000 - 7999	4.3	4.4	8.7	9.0	3.5	12.5	21.2
$8000 - 9999	3.8	4.1	7.9	8.4	3.3	11.7	19.6
$10,000 - 14,999	3.0	3.8	6.8	9.7	2.9	12.6	19.4
$15,000 and over	2.1	3.2	5.3	15.9	3.3	19.2	24.5
Average	3.8	4.2	8.0	9.6	3.5	13.1	21.1

*For source of data see (Weisbrod, 1963, p. 94). Data also include the estimated burden of corporate income tax.

programs. The slogan "worst-first" represented an attempt of the Economic Development Administration to give first priority to development of the most impoverished groups and areas. Efforts to bring industries and training to these entail low economic returns per dollar spent, and were perhaps no more effective than welfare grants. On this basis it should be recognized that some hard-core poverty can best be served by welfare grants--and many eligible people are not yet receiving assistance. Meanwhile, other cost-effective approaches may need to concentrate among viable groups and cities within development districts where efforts to attract industry will pay off.

Ranking highest are programs of national full employment. Since the government has largely accepted and acted on this policy, little need be said of it. Ranking second are programs to improve factor markets, particularly labor markets. The Federal-state cooperative employment service needs a substantial assist in funds and expertise, and must significantly expand its operations in all rural areas. Efforts by public and private groups to reduce discrimination must be redoubled, and can have a high economic payoff.

The third priority is education and training. Jobs, and knowledge of where job opportunities exist, will do little good for people who do not qualify for available jobs. The past underinvestment in general education and skill training in poor rural areas has resulted in a bucolic plague that will burden our great cities for years to come. The inertia of neglect can only be overcome with a giant infusion of Federal aid to education. The current programs are too fragmented and poorly financed to do the job. A substantial redistribution of Federal funds back to the states for education of the disadvantaged offers one useful approach. A redistribution of Federal revenues back to the states has much appeal, because it could give a progressive income redistribution if allocated according to the shortfall of state income below the national average.

Primary and secondary school quality must be raised in depressed rural areas by hiring more and better teachers, enriching the curriculum, and in some cases paying students to attend school. Vocational education also fills an important need, but is being overdone in some instances and should logically succeed efforts to improve basic education. Improvements in general and vocational education can be pursued concurrently in instances where funds and general education have not lagged seriously. An intensive program of preschool education for three-six year olds should receive an even higher priority than vocational or general schooling. Lastly, educational programs for adults round out the education priorities.

The fourth major priority is to attract industry to depressed rural areas with Federal grants, loans and tax concessions. It is suggested that substantial investment tax credits or grants be the principal tools to bring industry to viable cities in depressed rural areas and to encourage decentralization in America. The government is the largest single source of off-farm employment. There is considerable scope for the government not only to subsidize private firms locating in depressed areas, but also to locate more of its activities in rural areas characterized by low income.

Guaranteed public employment is ranked fifth in cost-effectiveness. There are obvious opportunities for able-bodied workers who lack adequate skills to contribute to society by improving the rural landscape and social overhead. Even greater opportunities to improve skills and earnings for such persons may be opened by joint government-private industry efforts. Private industry would train and provide jobs, while the government would pay to industry the difference between training costs and earnings until the actual productivity of workers reached a socially acceptable level.

The top four priorities are considered to be within the current means of the country. The sixth priority, a guaranteed annual income, may be attainable within the decade. A guaranteed annual income operated through, say, the Federal income tax structure could eliminate overt poverty. At the same time it would eliminate many current welfare programs that are difficult or impossible to administer satisfactorily. These troublesome programs continually jeopardize other poverty programs.

Two basic approaches to poverty can be used. One is to provide a minimum income and allow the individuals to allocate his income to food, housing, education and other uses as he sees fit. Another approach is to provide a specific public program offering food, another offering clothing, another education, and another housing. The latter provides the needy with what society deems to be basic essentials, but requires substantial administrative machinery. An advantage of the negative income tax is that administration could be streamlined, and some special programs of housing, food distribution and education could be eliminated. The additional cost of a guaranteed income, perhaps $12 billion per year, will be only one per cent of the GNP in a few years and a small real cost to eliminate poverty.

A second criterion for establishing program priorities

A second cost-effectiveness criterion is the local benefit-cost ratio associated with Federal funds alone. The principal change from the above ranking would be to give programs of industrialization and family planning a much higher priority. If the loss in employment in other areas is ignored, Federal programs to bring industrialization to depressed rural areas have very high benefit-cost ratios. If only state or local funds are considered, they too would have high benefit-cost ratios when only the local benefits of industrialization are considered. In short, this criterion does not reflect the real social benefits and costs, but helps to explain much of the emphasis on industrialization through local development corporations.

Family planning

No effort was made in the text to rank family planning as a cost-effectiveness measure to raise income of poor people. Unfortunately, research is not yet available to appraise the efficiency of this publically supported measure to help the poor. One can speculate however, that help in family planning ranks high, with an efficiency equal to that of education, as an effective means to alleviate poverty. As such, every effort should be made to provide at public expense the means for birth control to the poor that are now available to middle class families.

Consumer education, to create more intelligent buying habits among the poor, is another useful program that should not be overlooked. The Extension Service already has such programs that could be expanded.

Research on the cost-effectiveness of public programs for the disadvantaged has been plagued by inadequate financing. Clearly more effort is needed, and the above list of priorities of necessity must be viewed as tentative, awaiting more definitive analysis.

REFERENCES

Bachmura, Frank, December 1959, "Man-land Equalization through Migration," *American Economic Review*, Vol. 49, pp. 1004-1017.

Bachmura, Frank, August 1967, "Manpower and Well-Being in Rural Areas," pp. 133-172; In *Agricultural Policy: A Review of Programs and Needs*, National Advisory Commission on Food and Fiber, Washington, D. C.

Back, W. B., and Verner G. Hurt, 1961, "Potential for Agricultural Adjustment in the Quachita Highlands of Oklahoma," Oklahoma Agricultural Experiment Station Bulletin B-582, Stillwater.

Behavioral Science Center, 1968, "Business Leadership Training Project," Sterling Institute, Cambridge, Massachusetts.

Berry, Brian, December 1967, "Strategies, Models and Economic Theories of Development in Rural Regions," U. S. Department of Agriculture, Agricultural Economic Report No. 127, Washington, D. C.

Bird, Alan, R., 1964, "Poverty in Rural Areas of the United States," U. S. Department of Agriculture, Economics Report No. 63, Washington, D. C.

Bird, Caroline, July/August 1966, "The Visible Scar," *Challenge*, Vol. 14, No. 6, p. 39.

Bonnen, James T., April 1966, "Emerging Public Policy Orientations," pp. 59-76. In Agricultural Policy Institute, *Policies Affecting Rural People*, API Series 20, North Carolina State University, Raleigh.

Bonnen, James T., May 1966, "Rural Poverty: Programs and Problems," *Journal of Farm Economics*, Vol. 48, No. 2, pp. 452-465.

Booth, E. J. R., 1961, "Economic Development in Eastern Oklahoma until 1950," Unpublished Ph.D. Thesis, Library, Vanderbilt University, Nashville, Tennessee.

Booth, E. J. R., 1960, "The Potential for Rural Development in Cherokee County, Oklahoma," Oklahoma Agricultural Experiment Station Bulletin B-548, Stillwater.

Brazer, Harvey E., and Martin David, 1962, "Social and Economic Determinants of the Demand for Education," *Economics of Higher Education*, U. S. Department of Health, Education and Welfare, OE-50027, Washington, D. C.

Brewster, John M., November 1961, "Beliefs, Values and Economic Development," Journal of Farm Economics, Vol. 43, pp. 779-796.

Bryant, W. Keith, August 1966, "Causes of Inter-County Variations in Farmer's Earnings," Journal of Farm Economics, Vol. 48, No. 3, pp. 557-577.

Burchinal, Lee G., Archibald Haller and Marvin Taves, 1962, "Career Choices of Rural Youth in a Changing Society," Minnesota Agricultural Experiment Station Bulletin No. 458, St. Paul.

Bureau of the Budget, 1967, "The Budget in Brief," Executive Office of the President, Washington, D. C.

Burkett, W. K. and J. F. Thompson, 1965, "Low Incomes of Rural People in South Central Kentucky," Kentucky Agricultural Experiment Station Bulletin No. 697, Lexington.

Cain, Glen, 1967, "Benefit-Cost Estimates for Job Corps," (Mimeo), Office of Economic Opportunity, Washington, D. C.

Cain, Glen and Gerald Somers, 1967, "Retraining the Disadvantaged Worker," pp. 27-44; In Cathleen Quirk and Carol Sheehan, eds., Research in Vocational and Technical Education, Center for Studies in Vocational and Technical Education, University of Wisconsin, Madison.

Cain, Glen and Ernst Stormsdorfer, 1967, "An Economic Evaluation of the Government Retraining of the Unemployed in West Virginia," (Mimeo), Department of Economics, University of Wisconsin, Madison (Preliminary Report).

Carroll, Adger and Loren Ihnen, July 1966, "Costs and Returns of Technical Education: A Pilot Study," Department of Economics, North Carolina State University, Raleigh.

Caudill, Harry, 1965, "Reflections on Poverty in America," in Arthur B. Shostak and William Gomberg, eds. New Perspectives on Poverty (Englewood Cliffs, N. J.: Prentice-Hall, Inc., pp. 3-9).

Clawson, Marion, December 1967, "Rural Poverty in the United States," Journal of Farm Economics, Vol. 49, No. 5, pp. 1227-1234.

Cleland, Charles L., et. al., April 1965, "Review of Findings of the S-44 Southern Regional Research Project and Selected Other Regional and State Rural Research Projects," University of Georgia, Agricultural Experiment Station, Athens.

Cochrane, Willard, 1965, City Mans Guide to the Farm Problem, University of Minnesota Press, Minneapolis.

Coltrane, R. I., and E. L. Baum, 1965, "An Economic Survey of the Appalachian Region, "U. S. Department of Agriculture, Agricultural Economics Report No. 69, Washington, D. C.

Corazzini, A. J., 1966, "Vocational Education, A Study of Benefits and Costs," Industrial Relations Section, Princeton University, Princeton, New Jersey.

Diehl, William D., February 1966, "Farm-Nonfarm Migration in the Southwest: A Costs-Returns Analysis," *Journal of Farm Economics,* Vol. 48, No. 1, pp. 1-11.

"Economic Report of the President," 1965 to 1968 issues, U. S. Government Printing Office, Washington, D. C.

Folkman, William S., October 1961, "Rural Problem Areas Need Better Schools," *Agricultural Economics Research,* Vol. 13, No. 4, pp. 122-130.

Ford, Thomas R., 1965, "The Effects of Prevailing Values and Beliefs in the Perpetuation of Poverty in Rural Areas," in Agricultural Policy Institute, *Problems of Chronically Depressed Rural Areas,* API Series 19, Raleigh, North Carolina.

Galbraith, J. K., November 16, 1956, "Inequality in Agriculture--Problems and Program" (Unpublished lecture), Ontario College, Guelph, Canada.

Hathaway, Dale E., and Arley D. Waldo, 1964, "Multiple Jobholding by Farm Operators" Michigan Agricultural Experiment Station Research Bulletin No. 5, East Lansing.

Hanoch, Giora, August 1965, "Personal Earnings and Investment in Schooling," Unpublished Ph.D. Thesis, Library, University of Chicago.

Hansen, W. Lee, April 1963, "Total and Private Rates of Return to Investment in Schooling," *Journal of Political Economy,* Vol. 71, pp. 128-140.

Heady, Earl and Luther Tweeten, 1963, *Resource Demand and Structure of the Agricultural Industry,* Iowa State University Press, Ames.

Hines, Fred and Luther Tweeten, 1968, "Push-Pull and Schooling Investment," (Mimeo), Department of Agricultural Economics, Oklahoma State University, Stillwater.

Hirsch, W. Z., E. W. Segelhorst and M. J. Marcus, 1964, "Spillover of Public Education Costs and Benefits (II)," Institute of Government and Public Affairs, University of California, Los Angeles.

Hobbs, Daryl J., George M. Beal, and Joe H. Bohlen, June 1964, "The Relation of Farm Operator Values and Attitudes to their Economic Performance," Rural Sociology Report No. 33, Department of Economics and Sociology, Iowa State University, Ames.

Horner, James T., James Buterbough, and J. Judith Carefoot, 1967, "Factors Relating to Occupational and Educational Decision Making of Rural Youth," Department of Agricultural Education Report No. 1, Nebraska Agricultural Experiment Station, Lincoln.

"How About Welfare Kids?," November 21, 1967, Stillwater News-Press, Stillwater, Oklahoma, p. 10.

Jordan, Max, and Lloyd Bender, July 1966, "An Economic Survey of the Ozark Region," U. S. Department of Agriculture, Agricultural Economics Report No. 97, Washington, D. C.

Jordan, Max, James Goldin and Lloyd Bender, 1967, "Aspirations and Capabilities of Rural Youth," Arkansas Agricultural Experiment Station Bulletin No. 722, Fayetteville.

Lampman, Robert J., 1966, "Population Change and Poverty Reduction, 1947-75," Chapter 2 in Leo Fishman, ed., Poverty Amid Affluence, Yale University Press, New Haven, Connecticut.

Larson, Olaf, December 1965, "Sociological Aspects of the Low-Income Farm Problem," Journal of Farm Economics, Vol. 38, No. 5, pp. 1417-1427.

Larson, Robert E., 1968, "Industrial Development for Rural Poverty Areas," (Mimeo), Stanford University, Stanford, California.

Levitan, S. A., 1964, Federal Aid to Depressed Areas, Johns Hopkins Press, Baltimore.

Lewis, W. Arthur, 1957, The Theory of Economic Growth, Ruskin House, George Allen and Unwin, Ltd, London.

Little, Charles H., and Gerald A. Doeksen, February 1968, "An Input-Output Analysis of Oklahoma's Economy," Oklahoma Agricultural Experiment Station Technical Bulletin No. T-124, Stillwater.

Loomis, Charles P., 1960, Social Systems, D. Van Norstrand Company, Inc., Princeton, New Jersey.

Loomis, R. A., and M. E. Wirth, 1967, "An Economic Survey of the Northern Lake States Region," U. S. Department of Agriculture, Economics Report No. 108, Washington, D. C.

McClelland, David C., 1961, The Achieving Society, D. Van Norstrand Company, Inc., Princeton, New Jersey.

Merton, Robert K., 1957, *Social Theory and Social Structure*, The Free Press, Glencoe, Illinois.

Morgan, J. N., M. H. David, W. J. Cohen and H. E. Brazer, 1961, *Income and Welfare in the United States*, McGraw-Hill Book Company, Inc., New York.

Morgan, J. N., I. S. Sirageldi and Nancy Baerwaldt, 1966, *Productive Americans*, Survey Research Monograph 43, Institute of Social Research, University of Michigan, Ann Arbor.

Nam, Charles B. and Mary G. Powers, 1963, "Educational Status of Rural Youth," Chapter 8, in Lee Burchinal, ed., *Rural Youth in Crisis*, U. S. Government Printing Office, Washington, D. C.

National Advisory Commission on Food and Fiber, July 1967, *Food and Fiber for the Future*, U. S. Government Printing Office, Washington, D. C.

National Advisory Commission on Rural Poverty, September 1967, *The People Left Behind*, U. S. Government Printing Office, Washington, D. C.

Nicholls, William H., May 1957, "Human Resources and Industrial Development in the Upper East Tennessee Valley 1900-1950," *Quarterly Journal of Economics*, Vol. 71, No. 2, pp. 289-316.

Nicholls, William H., 1960, *Southern Tradition and Regional Progress*, University of North Carolina Press, Chapel Hill.

Office of Economic Opportunity, June 1967, "Catalog of Federal Assistance Programs," Executive Office of the President, Washington, D. C.

Office of Economic Opportunity, 1967, "The Quiet Revolution," Executive Office of the President, Washington, D. C.

Okun, Bernard and R. W. Richardson, 1961, *Studies in Economic Development* (New York: Holt, Rinehart and Winston).

Olson, Carl and Odell Walker, December 1966, "Agricultural Adjustments and Area Economic Interrelationships," *Journal of Farm Economics*, Vol. 48, pp. 1570-1574.

Parks, A. C., 1966, "Some Stimulants to Social and Economic Change," Chapter 10, In G. R. Winter and W. Rogers, eds., *Stimulants to Economic Development in Slow Growing Regions*, Department of Agricultural Economics, University of Alberta, Edmonton.

Perkins, Brian and Dale Hathaway, 1966, "Movement of Labor Between Farm and Nonfarm Jobs," Michigan Agricultural Experiment Station Research Bulletin No. 13, East Lansing.

Perloff, Harvey S., et. al., 1960, Regions, Resources and Economic Growth, University of Nebraska Press, Lincoln.

Redfern, Martin, 1968, Unpublished data on rates of return on education, Department of Agricultural Economics, Oklahoma State University, Stillwater.

Rinehart, James R., April 1963, "Rates of Return on Municipal Subsidies to Industry," Southern Economic Journal, Vol. 29, pp. 297-306.

Ruttan, V. W., 1958, "The Potential in Rural Development and Local Economic Development," Chapter 12; In Earl Heady, et. al. eds., Agricultural Adjustment Problems in a Growing Economy, Iowa State University Press, Ames.

Saltzman, Raymond, April 1964, "Economic Case Studies of Community Sponsored Efforts to Develop Industry," College of Business Administration, University of Tulsa, Tulsa, Oklahoma.

Schnore, Leo F., June 1966, "The Rural-Urban Variable: An Urbanite's Perspective," Rural Sociology, Vol. 31, 135-143.

Schultz, T. W., 1953, The Economic Organization of Agriculture, McGraw-Hill Book Company, New York.

Secretary of Labor, 1966, "Manpower Research and Training under the MDTA," U. S. Department of Labor, Washington, D. C.

Smith, Eldon, August 1956, "Nonfarm Employment Information for Rural People," Journal of Farm Economics, Vol. 38, pp. 813-827.

Smith, Wesley and Venkareddy Chennareddy, March 1967, "Movement of Labor Between Farm and Nonfarm Sectors in the Tennessee Valley, " T67-4AE, National Fertilizer Development Center, TVA, Muscle Shoals, Alabama.

Stinson, Thomas, 1967, "Financing Industrial Development through State and Local Government," U. S. Department of Agriculture, Economic Report No. 128, Washington, D. C.

Tang, Anthony M., 1965, "A Critical Analysis of the Area Redevelopment Act and Local Subsidies to Industry," in Agricultural Policy Institute, Problems of Chronically Depressed Rural Areas, API Series 19, Raleigh, North Carolina, pp. 85-99.

Tang, Anthony, 1958, Economic Development in the Southern Piedmont, 1860-1950, University of North Carolina Press, Chapel Hill.

Thurow, Lester, February 1967, "The Causes of Poverty," Quarterly Journal of Economics, Vol. 71, No. 1, pp. 39-57.

Tweeten, Luther, June 1967, "The Role of Education in Alleviating Rural Poverty," U. S. Department of Agriculture, Economic Report No. 114, Washington, D. C.

Tweeten, Luther, 1966, "Socio-Economic Growth Theory," Chapter 1, In G. R. Winter and W. Rogers, eds., Stimulants to Economic Development in Slow Growing Regions, Department of Agricultural Economics, University of Alberta, Edmonton.

Tweeten, Luther and Odell Walker, 1963, "Estimating Socio-Economic Effects of a Declining Farm Population in a Sparse Area," Regional Economic Analysis, Agricultural Policy Institute, Raleigh, North Carolina.

U. S. Bureau of the Census, 1963, "U. S. Census of Population 1960, Educational Attainment," Final Report PC (2)-5B, Washington, D. C.

U. S. Department of Agriculture, October 1966, "Rural People in the American Economy," U. S. Department of Agriculture, Economic Report No. 101, Washington, D. C.

U. S. Department of Commerce, 1966, Statistical Abstract of the United States, U. S. Government Printing Office, Washington, D. C.

U. S. Department of Commerce, 1967, "Economic Development Administration: Annual Report," U. S. Government Printing Office, Washington, D. C.

Weisbrod, Burton, 1963, Spillover of Public Education Costs and Benefits (I) Washington University, St. Louis, Missouri.

Welch, Finis, 1965, "Schooling versus Education" Department of Economics, University of Chicago, Chicago. (Mimeo).

White House and U. S. Department of Labor, Issues for 1965, 1966, and 1967, "Manpower Report of the President," U. S. Government Printing Office, Washington, D. C.

Yoho, James and Allan Schmid, May 1965, "Area Development: Observations on a Failure," Journal of Farm Economics, Vol. 47, pp. 468-470.

Zimmer, John, December 1967, "Expenditures for Public Elementary and Secondary Education," Journal of Farm Economics, Vol. 49, No. 5, pp. 1204-1208.